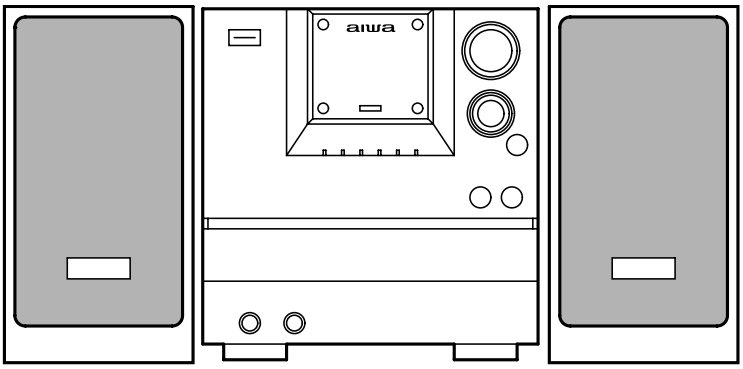
aiwa SERVICE

XS-G7 EZ
XS-G9 EZ



SERVICE MANUAL

COMPACT DISC
STEREO SYSTEM

BASIC CD MECHANISM : BZG-5 ZD3GNDM

SYSTEM	CD STEREO RECEIVER	SPEAKER	REMOTE CONTROLLER
XS-G7	CX-G7	SX-G7	RC-BAS15
XS-G9	CX-G9	SX-G9	

• If requiring information about the CD mechanism, see Service Manual of BZG-5, (S/M Code No. 09-00C-353-3N4).

aiwa

S/M Code No. 09-017-446-2R1

SPECIFICATIONS

MAIN UNIT CX-G7 / CX-G9

TUNER

FM tuning range	87.5 MHz to 108 MHz
FM usable sensitivity (IHF)	16.8 dBf
FM antenna terminal	75 ohms (unbalanced)
MW tuning range	531 kHz to 1602 kHz (9 kHz step) 530 kHz to 1710 kHz (10 kHz step)
MW usable sensitivity	350 µV/m
LW tuning range	144 kHz to 290 kHz
LW usable sensitivity	1400 µV/m
MW/LW antenna	Loop antenna

AMPLIFIER

Power output	Rated: 56 W + 56 W (6 ohms, THD 1 %, 1 kHz/DIN 45500) Reference: 70 W + 70 W (6 ohms, THD 10 %, 1 kHz/DIN 45324) DIN MUSIC POWER: 190 W + 190 W
Total harmonic distortion	0.08 % (25 W, 1 kHz, 6 ohms, DIN AUDIO)
Inputs	VIDEO/AUX: 500 mV MD: 500 mV MIC: 1.0 mV (10 kohms)
Outputs	FRONT SPEAKERS: 6 ohms or more SURROUND SPEAKERS: 8 ohms to 16 ohms SUB WOOFER: 1.8 V LINE OUT: 80 mV CD DIGITAL OUT (OPTICAL) PHONES: 32 ohms or more AC OUTLET: Switched

CD PLAYER

Laser	Semiconductor laser (λ = 780 nm)
D/A converter	1 bit dual
Signal-to-noise ratio	85 dB (1 kHz, 0 dB)
Harmonic distortion	0.05 % (1 kHz, 0 dB)

GENERAL

Power requirements	230 V AC, 50 Hz
Power consumption	130 W
Standby power consumption	ECO ON: 0.6 W ECO OFF: 20 W
Dimensions (W x H x D)	260 x 266 x 350 mm
Weight	8.3 kg

FRONT SPEAKERS SX-G7 (for XS-G7)

Speaker system	2 way, bass reflex (magnetic shielded)
Speaker units	Woofer: 140 mm cone Tweeter: 25 mm dome
Impedance	6 ohms
Dimensions (W x H x D)	182 x 328 x 269 mm
Weight	3.8 kg

FRONT SPEAKERS SX-G9 (for XS-G9)

Speaker system	2 way, bass reflex (magnetic shielded)
Speaker units	Woofer: 140 mm cone Tweeter: 25 mm dome
Impedance	6 ohms
Dimensions (W x H x D)	182 x 328 x 250 mm
Weight	4.0 kg

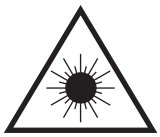
• Design and specifications are subject to change without notice.

• The word "BBE"and the "BBE symbol" are trademarks of BBE Sound, Inc.
Under license from BBE Sound,Inc.

PROTECTION OF EYES FROM LASER BEAM DURING SERVICING

This set employs laser. Therefore, be sure to follow carefully the instructions below when servicing.

WARNING!!
WHEN SERVICING, DO NOT APPROACH THE LASER EXIT WITH THE EYE TOO CLOSELY. IN CASE IT IS NECESSARY TO CONFIRM LASER BEAM EMISSION. BE SURE TO OBSERVE FROM A DISTANCE OF MORE THAN 30cm FROM THE SURFACE OF THE OBJECTIVE LENS ON THE OPTICAL PICK-UP BLOCK.



- Caution: Invisible laser radiation when open and interlocks defeated avoid exposure to beam.
- Advarsel: Usynlig laserståling ved åbning, når sikkerhedsafbrydere er ude af funktion. Undgå udsættelse for stråling.

VAROITUS!
Laiteen Käyttäminen muulla kuin tässä käyttöohjeessa mainitulla tavalla saataa altistaa käyt-täjän turvallisuusluokan 1 ylittävälle näkymättömälle lasersäteilylle.

VARNING!
Om apparaten används på annat sätt än vad som specificeras i denna bruksanvising, kan användaren utsättas för osynling laserstrålning, som överskrider gränsen för laserklass 1.

CAUTION
Use of controls or adjustments or performance of procedures other than those specified herin may result in hazardous radiation exposure.

ATTENTION
L'utillisation de commandes, réglages ou procédures autres que ceux spécifiés peut entraîner une dangereuse exposition aux radiations.

ADVARSEL
Usynlig laserståling ved åbning, når sikkerhedsafbrydereer ude af funktion. Undgå udsættelse for stråling.

This Compact Disc player is classified as a CLASS 1 LASER product.
The CLASS 1 LASER PRODUCT label is located on the rear exterior.

CLASS 1	LASER PRODUCT
KLASSE 1	LASER PRODUKT
LUOKAN 1	LASER LAITE
KLASS 1	LASER APPARAT

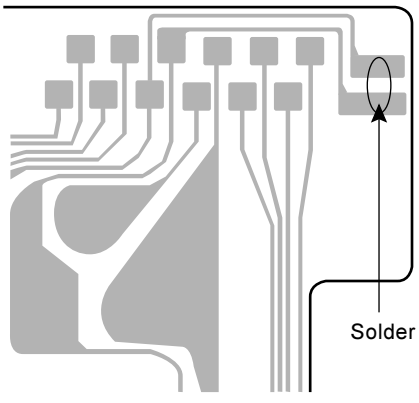
Precaution to replace Optical block

(KSS-213F)

Body or clothes electrostatic potential could ruin laser diode in the optical block. Be sure ground body and workbench, and use care the clothes do not touch the diode.

1) After the connection, remove solder shown in right figure.

CD PICK-UP Assy PWB



NOTE ON BEFORE STARTING REPAIR

1. Forced discharge of electrolytic capacitor of power supply block

When repair is going to be attempted in the set that uses relay circuit in the power supply block, electric potential is kept charged across the electrolytic capacitors (C101, 102) even though AC power cord is removed. If repair is attempted in this condition, secondary defect can occur.
In order to prevent the secondary trouble, perform the following measures before starting repair work.

Discharge procedure

① Remove the AC power cord.
② Connect a discharging resistor at an end of lead wire that has clips at both ends. Connect the other end of the lead wire to metal chassis.
③ Contact the other end of the discharging resistor to the positive (+) side (+VH) of C101. (For two seconds)
④ Contact the same end of the discharging resistor as step ③ to the negative (-) side (-VH) of C102 in the same way. (For two seconds)
⑤ Check that voltage across C101 and C102 has decreased to 1 V or less using a multimeter or an oscilloscope.

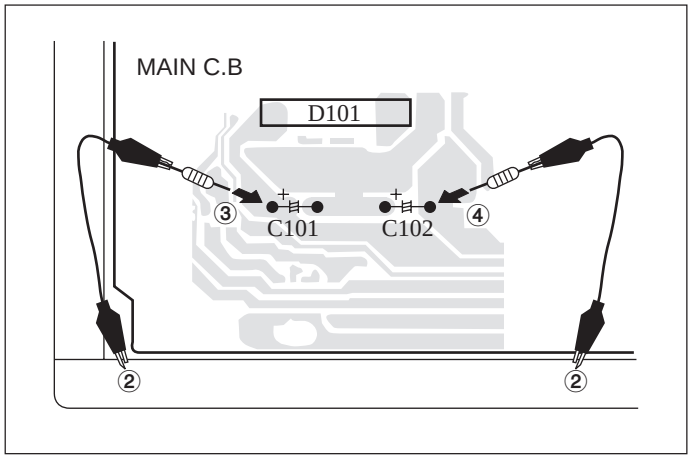


Fig-1

Select a discharging resistor referring to the following table.

Charging voltage (V) (C101, 102)	Discharging resistor (Ω)	Rated power (W)	Parts number
25-48	100	3	87-A00-247-090
49-140	220	5	87-A00-232-090

Note: The reference numbers (C101, C102) of the electrolytic capacitors can change depending on the models. Be sure to check the reference numbers of the charging capacitors on schematic diagram before starting the discharging work.

2. Check items before exchanging the MICROCOMPUTER

Be sure to check the following items before exchanging the MICROCOMPUTER. Exchange the MICROCOMPUTER after confirming that the MICROCOMPUTER is surely defective.

2-1. Regarding the HOLD terminal of the MICROCOMPUTER

When the HOLD terminal (INPUT) of the MICROCOMPUTER is "H", the MICROCOMPUTER is judged to be operating correctly. When this terminal is "L", the main power cannot be turned on. Therefore, be sure to check the terminal voltage of the HOLD terminal before exchange.
When the MICROCOMPUTER is not defective, the HOLD terminal can also go "L" when the POWER AMPLIFIER has any abnormalities that triggers the abnormality detection circuit on the MAIN C. B. that sets the HOLD terminal to "L".

- Good or no good judgement of the MICROCOMPUTER

① Turn on the AC main power.
② Confirm that the main power is turned on and the HOLD terminal of the MICROCOMPUTER keeps the "H" level or not.
③ When the HOLD terminal is "L" level, the abnormality detection circuit is judged to be working correctly and the MICROCOMPUTER is judged to be good.

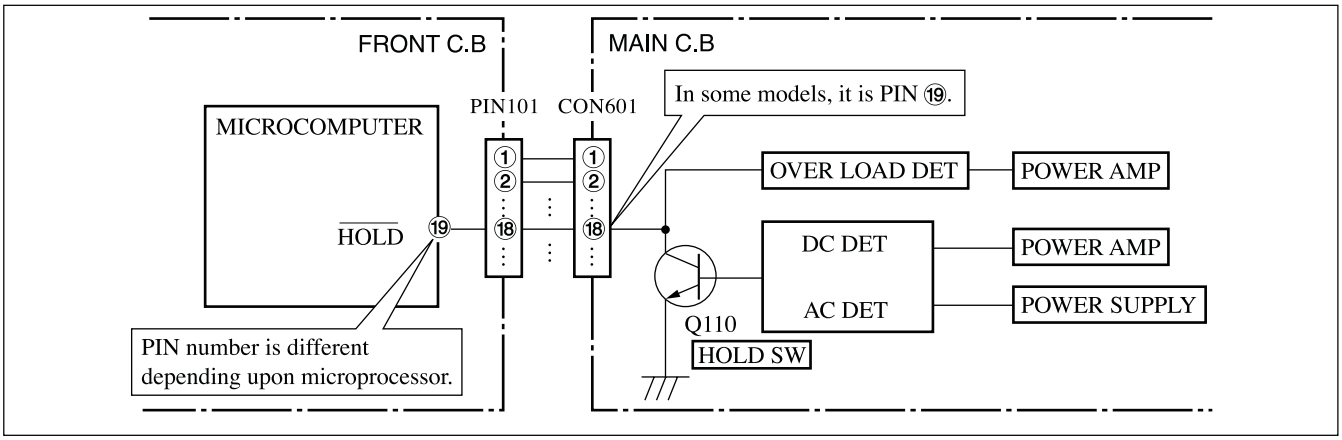


Fig-2-1

In such a case, check also if the POWER AMPLIFIER circuit or power supply circuit has any abnormalities or not.

2-2. Regarding reset

There are cases that the machine does not work correctly because the MICROCOMPUTER is not reset even though the AC power cord is re-inserted, or the software reset (pressing the STOP key + POWER key) is performed.
When the above described phenomenon occurs, it can lead to wrong judgement as if the MICROCOMPUTER is defective and to exchange the MICROCOMPUTER. In such a case, perform the forced-reset by the following procedure and check good or no good of the MICROCOMPUTER.

① Remove the AC power cord.

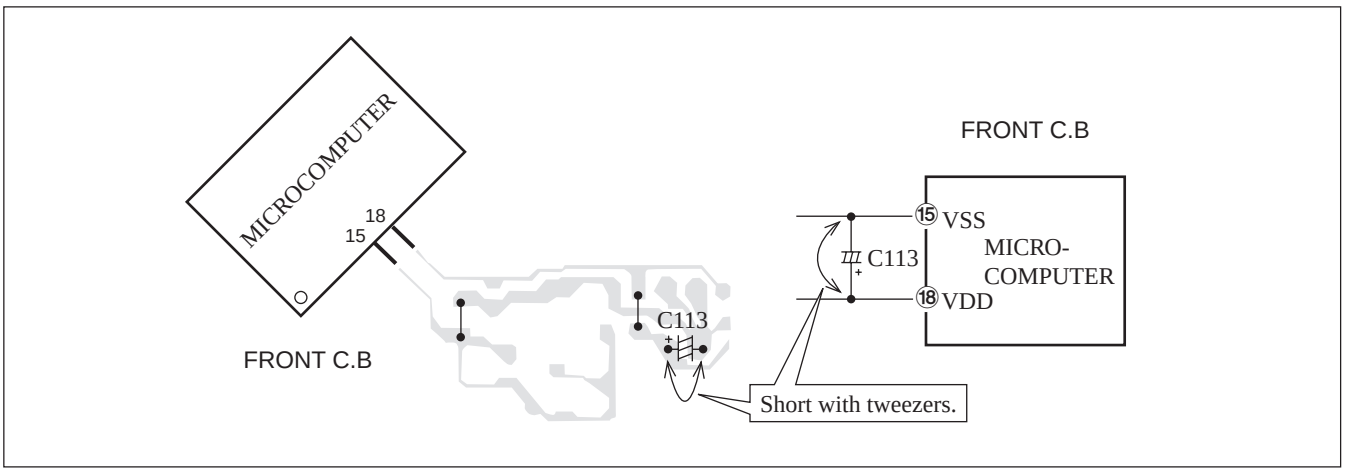


Fig-2-2

② Short both ends of the electrolytic capacitor C113 that is connected to VDD of the MICROCOMPUTER with tweezers.
③ Connect the AC power cord again. If the MICROCOMPUTER returns to the normal operation, the MICROCOMPUTER is good.

Note: The reference number or MICROCOMPUTER pin number of transistor (Q110) and electrolytic capacitor (C113) can change depending on the models. Be sure to check the reference numbers on schematic diagram before starting the discharging work.

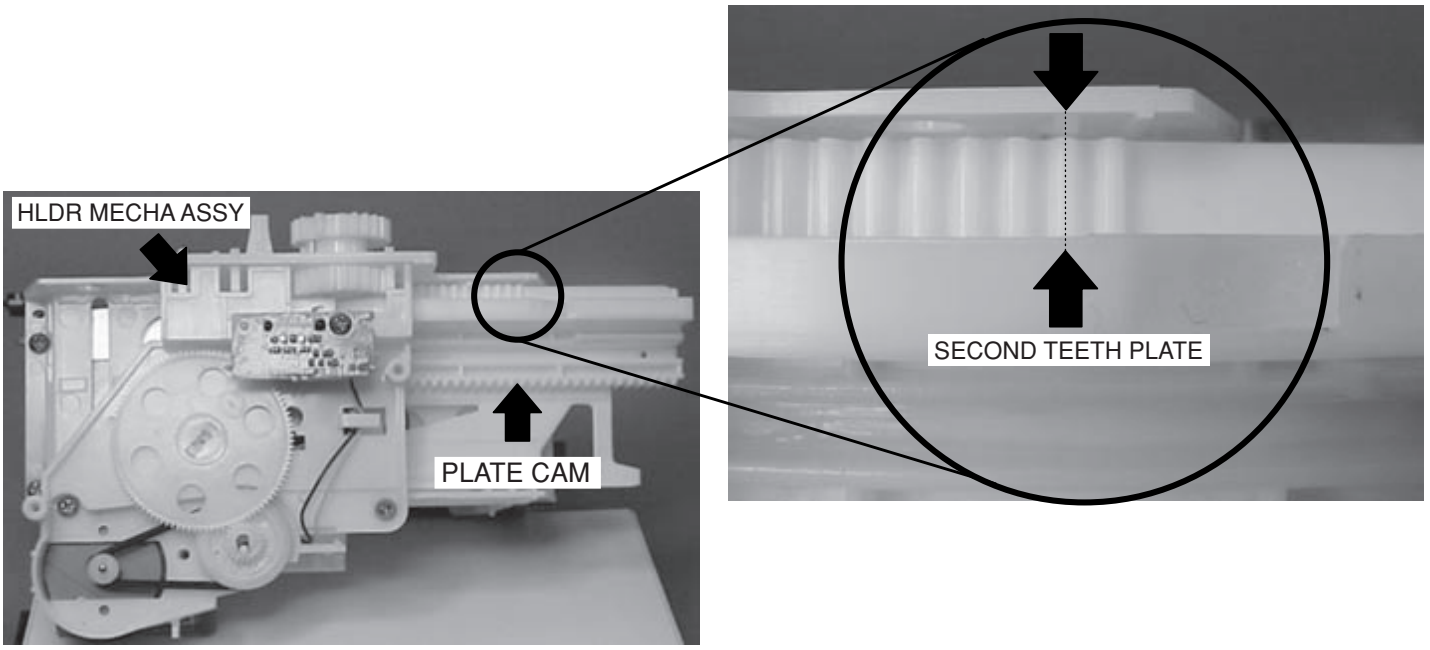
2-3. Confirmation of soldering state of MICROCOMPUTER

Check the soldering state of the MICROCOMPUTER in addition to the above described procedures. Be sure to exchange the MICROCOMPUTER after surely confirming that the trouble is not caused by poor soldering but the MICROCOMPUTER itself.

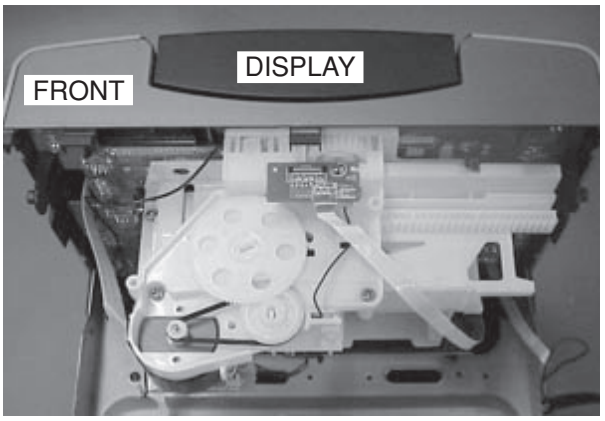
PHASE ALIGNMENT

How to install HLDR MECHA ASSY

1. Align the PLATE MAIN CAM of the HLDR MECHA ASSY to the position as shown in the diagram below.



2. Install the HLDR MECHA ASSY with the display part of the main unit in a lowered position.



* When assembling HLDR MECHA ASSY, particular phase alignment is not required.

ELECTRICAL MAIN PARTS LIST

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
IC			
	8B-NFW-601-030		C-IC,LC877264V-5W17
	87-A21-831-010		IC,SPS-422-1-F1
	87-A21-401-040		C-IC,M61503FP
	87-A21-021-040		C-IC,BU2099FV
	87-A21-023-040		C-IC,BA3835F
	87-A21-695-010		IC,LA1845L
	87-A20-440-040		C-IC,BU1920FS
	87-070-127-110		IC,LC72131D-N
TRANSISTOR			
	87-A30-559-010		TR,CSB1370EF
	87-026-610-080		TR,KTC3198GR
	87-A30-076-080		C-TR,2SC3052F
	87-A30-075-080		C-TR,2SA1235F
	87-A30-494-080		TR,2SA1980G
	87-A30-635-040		C-TR,SBT5401F
	87-A30-484-080		C-TR,KRA102S
	87-A30-190-080		TR,CC5551
	87-A30-636-040		C-TR,SBT5551F
	87-A30-528-010		TR,2SB1686
	87-A30-529-010		TR,2SD2642
	87-A30-087-080		C-FET,2SK2158
	87-A30-490-080		C-TR,KRC107S
	87-A30-047-080		TR,CSD655E
	87-A30-074-080		C-TR,RT1P141C
	87-A30-071-080		C-TR,RT1N144C
	87-A30-162-010		FET,2SK2937
	87-A30-520-080		TR,2SC5342Y
	87-A30-515-080		TR,2SA1979O/Y
	87-A30-090-080		FET,2SK2541
	87-A30-435-040		C-TR,DTC144EKA
	89-327-143-080		C-TR,2SC2714O
	87-A30-489-080		C-TR,KRA107S
	87-A30-086-040		C-TR,CSD1306E
	89-503-602-080		C-FET,2SK360E
	87-A30-234-080		TR,CSC4115BC
DIODE			
	87-A40-291-080		DIODE,1N4148M (CPT)
	87-A40-839-090		DIODE,G5SBA60L-6088
	87-A40-455-090		DIODE,RL203 GW
	87-A40-764-080		ZENER,UZ10BSC
	87-A40-553-080		DIODE,1N4003 LES
	87-A40-270-080		C-DIODE,MC2838
	87-A40-269-080		C-DIODE,MC2836
	87-A40-748-080		ZENER,UZ5.6BSA
	87-020-465-080		DIODE,1SS133
	87-A40-393-090		DIODE,1N5402GW(F20)
	87-A40-747-080		ZENER,UZ5.1BSB
	87-A40-749-080		ZENER,UZ5.6BSB
	87-A40-739-080		ZENER,UZ2.7BSA
	87-017-149-080		ZENER,HZS6A2L
MAIN C.B			
C3	87-012-368-080		C-CAP,S 0.1-50 F
C4	87-012-368-080		C-CAP,S 0.1-50 F
C5	87-012-368-080		C-CAP,S 0.1-50 F
C6	87-012-368-080		C-CAP,S 0.1-50 F
C9	87-010-759-080		C-CAP,U, 0.1-25F
C10	87-010-759-080		C-CAP,U, 0.1-25F
C11	87-010-759-080		C-CAP,U, 0.1-25F
C12	87-010-759-080		C-CAP,U, 0.1-25F
C19	87-A12-036-000		CAP,E 2200-63 SMG
C20	87-A12-036-000		CAP,E 2200-63 SMG
C21	87-A10-520-000		CAP,E 3300-35 M SMG
C22	87-A10-520-000		CAP,E 3300-35 M SMG
C32	87-012-286-080		CAP, U 0.01-25
C34	87-A12-072-080		CAP,E 100-25 SMG
C35	87-A12-090-080		CAP,E 4.7-50 SMG
C36	87-A12-066-080		CAP,E 47-16 SMG
C38	87-012-286-080		CAP, U 0.01-25
C60	87-A12-089-080		CAP,E 3.3-50 SMG
C61	87-A12-071-080		CAP,E 47-25 SMG
C83	87-A12-068-080		CAP,E 470-16 SMG
C97	87-010-831-080		C-CAP,U,0.1-16F
C101	87-012-279-080		C-CAP,U 2700P-50 B
C102	87-012-279-080		C-CAP,U 2700P-50 B
C103	87-A12-084-080		CAP,E 0.22-50 SMG
C104	87-A12-084-080		CAP,E 0.22-50 SMG
C107	87-A12-089-080		CAP,E 3.3-50 SMG
C108	87-A12-089-080		CAP,E 3.3-50 SMG
C109	87-012-195-080		C-CAP,U 100P-50CH
C110	87-012-195-080		C-CAP,U 100P-50CH
C111	87-A12-077-080		CAP,E 33-35 SMG
C112	87-A12-077-080		CAP,E 33-35 SMG
C113	87-A10-596-080		C-CAP,S 100P-100 J CH
C114	87-A10-596-080		C-CAP,S 100P-100 J CH
C117	87-012-368-080		C-CAP,S 0.1-50 F
C118	87-012-368-080		C-CAP,S 0.1-50 F
C119	87-012-286-080		CAP, U 0.01-25
C120	87-012-286-080		CAP, U 0.01-25
C123	87-010-177-080		C-CAP,S 820P-50 SL
C124	87-010-177-080		C-CAP,S 820P-50 SL
C133	87-012-282-080		CAP, U 4700P-50
C140	87-012-278-080		C-CAP,U 2200P-50 B
C186	87-010-759-080		C-CAP,U, 0.1-25F
C187	87-010-866-080		CAP, ELECT 10-63
C188	87-010-866-080		CAP, ELECT 10-63
C225	87-012-368-080		C-CAP,S 0.1-50 F
C226	87-012-368-080		C-CAP,S 0.1-50 F
C227	87-012-368-080		C-CAP,S 0.1-50 F
C228	87-012-368-080		C-CAP,S 0.1-50 F
C229	87-010-191-080		C-CAP,S 0.015-50 F
C230	87-010-191-080		C-CAP,S 0.015-50 F
C231	87-012-286-080		CAP, U 0.01-25
C232	87-012-286-080		CAP, U 0.01-25
C235	87-A12-094-080		CAP,E 47-50 SMG
C236	87-A12-094-080		CAP,E 47-50 SMG
C241	87-010-831-080		C-CAP,U,0.1-16F
C609	87-010-785-080		C-CAP,U0.015-25BK
C610	87-010-785-080		C-CAP,U0.015-25BK
C611	87-A12-084-080		CAP,E 0.22-50 SMG
C612	87-A12-084-080		CAP,E 0.22-50 SMG
C613	87-A12-084-080		CAP,E 0.22-50 SMG
C614	87-A12-084-080		CAP,E 0.22-50 SMG
C615	87-012-172-080		CAPACITOR CHIP U 10P CH
C616	87-016-045-080		CAP,E 1000-6.3 M SMG
C617	87-016-459-080		CAP,E 470-10 M SMG
C618	87-A12-091-080		CAP,E 10-50 SMG
C620	87-A12-062-080		CAP,E 100-10 SMG
C623	87-A12-084-080		CAP,E 0.22-50 SMG
C624	87-A12-084-080		CAP,E 0.22-50 SMG
C630	87-A10-260-080		C-CAP,U 0.1-16 K B
C631	87-012-281-080		C-CAP,U 3900P-50 B
C632	87-012-281-080		C-CAP,U 3900P-50 B
C633	87-A11-070-080		C-CAP,U 0.033-16 K B
C634	87-A11-070-080		C-CAP,U 0.033-16 K B
C669	87-012-273-080		C-CAP,U 820P-50 B
C670	87-012-273-080		C-CAP,U 820P-50 B
C671	87-010-759-080		C-CAP,U, 0.1-25F
C672	87-010-759-080		C-CAP,U, 0.1-25F
C673	87-012-278-080		C-CAP,U 2200P-50 K B
C674	87-010-133-080		CAP, ELECT 2.2-50V
C675	87-010-133-080		CAP, ELECT 2.2-50V
C677	87-012-286-080		CAP, U 0.01-25

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
C681	87-012-274-080		CHIP CAP,U 1000P-50B
C682	87-012-274-080		CHIP CAP,U 1000P-50B
C683	87-012-336-080		C-CAP,U 330P-50 J SL
C684	87-012-336-080		C-CAP,U 330P-50 J SL
C691	87-012-274-080		CHIP CAP,U 1000P-50B
C692	87-012-274-080		CHIP CAP,U 1000P-50B
C693	87-012-336-080		C-CAP,U 330P-50 J SL
C694	87-012-336-080		C-CAP,U 330P-50 J SL
C771	87-A12-062-080		CAP,E 100-10 SMG
C772	87-012-286-080		CAP, U 0.01-25
C779	87-010-949-080		CHIP CAPACITOR,S 0.01-50 BJ
C780	87-010-949-080		CHIP CAPACITOR,S 0.01-50 BJ
C782	87-012-286-080		CAP, U 0.01-25
C783	87-012-286-080		CAP, U 0.01-25
C784	87-012-286-080		CAP, U 0.01-25
C785	87-012-286-080		CAP, U 0.01-25
C786	87-012-286-080		CAP, U 0.01-25
C788	87-012-167-080		C-CAP,U 5P-50 CH
C789	87-016-118-080		C-CAP,U0.022-25BJ
C790	87-016-118-080		C-CAP,U0.022-25BJ
C791	87-010-831-080		C-CAP,U,0.1-16F
C792	87-012-286-080		CAP, U 0.01-25
C793	87-A12-090-080		CAP,E 4.7-50 SMG
C795	87-012-286-080		CAP, U 0.01-25
C796	87-012-286-080		CAP, U 0.01-25
C797	87-A12-091-080		CAP,E 10-50 SMG
C798	87-012-286-080		CAP, U 0.01-25
C799	87-010-407-080		CAP, ELECT 33-50V
C800	87-010-829-080		CAP, U 0.047-16
C801	87-A12-089-080		CAP,E 3.3-50 SMG
C802	87-010-829-080		CAP, U 0.047-16
C803	87-010-787-080		CAP, U 0.022-25
C804	87-A12-062-080		CAP,E 100-10 SMG
C807	87-A12-086-080		CAP,E 0.47-50 SMG
C808	87-A12-087-080		CAP,E 1-50 SMG
C809	87-A12-087-080		CAP,E 1-50 SMG
C810	87-010-831-080		C-CAP,U,0.1-16F
C814	87-012-286-080		CAP, U 0.01-25
C815	87-A12-086-080		CAP,E 0.47-50 SMG
C816	87-A12-086-080		CAP,E 0.47-50 SMG
C818	87-012-276-080		CAP, CHIP SS 1500 PBK
C821	87-A12-091-080		CAP,E 10-50 SMG
C823	87-A10-915-080		C-CAP,U 1000P-25 J CH
C824	87-A12-090-080		CAP,E 4.7-50 SMG
C825	87-010-596-080		CAP, S 0.047-16
C831	87-A12-092-080		CAP,E 22-50 SMG
C842	87-012-286-080		CAP, U 0.01-25
C843	87-010-197-080		CAP, CHIP 0.01 DM
C844	87-012-286-080		CAP, U 0.01-25
C845	87-010-197-080		CAP, CHIP 0.01 DM
C846	87-010-197-080		CAP, CHIP 0.01 DM
C847	87-010-197-080		CAP, CHIP 0.01 DM
C848	87-010-197-080		CAP, CHIP 0.01 DM
C849	87-010-197-080		CAP, CHIP 0.01 DM
C850	87-A12-071-080		CAP,E 47-25 SMG
C851	87-012-286-080		CAP, U 0.01-25
C852	87-012-286-080		CAP, U 0.01-25
C853	87-012-286-080		CAP, U 0.01-25
C858	87-010-831-080		C-CAP,U,0.1-16F
C859	87-010-831-080		C-CAP,U,0.1-16F
C860	87-012-286-080		CAP, U 0.01-25
C869	87-012-286-080		CAP, U 0.01-25
C870	87-012-274-080		CHIP CAP,U 1000P-50B
C871	87-012-199-080		CAP 220P
C872	87-012-199-080		CAP 220P
C873	87-A10-039-080		C-CAP,U 470P-50 J CH
C874	87-A12-091-080		CAP,E 10-50 SMG
C875	87-010-759-080		C-CAP,U, 0.1-25F
C876	87-A12-091-080		CAP,E 10-50 SMG
C877	87-012-286-080		CAP, U 0.01-25
C878	87-012-184-080		C-CAP,U 33P-50 CH
C879	87-012-180-080		C-CAP,U 22P-50 CH
C940	87-012-286-080		CAP, U 0.01-25
C942	87-012-165-080		CAP 3P
C947	87-012-286-080		CAP, U 0.01-25
C948	87-A10-039-080		C-CAP,U 470P-50 J CH
C952	87-012-286-080		CAP, U 0.01-25
C957	87-012-174-080		CAP CHIP CERA SS 12P CHJ
C958	87-012-286-080		CAP, U 0.01-25
C959	87-010-831-080		C-CAP,U,0.1-16F
C960	87-010-831-080		C-CAP,U,0.1-16F
C962	87-A12-087-080		CAP,E 1-50 SMG
C963	87-015-785-080		CHIP CAPACITOR, 0.1FZ-25Z
C971	87-A12-067-080		CAP,E 330-16 SMG
C972	87-A12-090-080		CAP,E 4.7-50 SMG
C973	87-012-286-080		CAP, U 0.01-25
C974	87-012-286-080		CAP, U 0.01-25
C979	87-012-195-080		C-CAP,U 100P-50CH
C981	87-A12-071-080		CAP,E 47-25 SMG
C982	87-010-831-080		C-CAP,U,0.1-16F
C983	87-012-286-080		CAP, U 0.01-25
C984	87-012-286-080		CAP, U 0.01-25
C985	87-012-195-080		C-CAP,U 100P-50CH
C987	87-012-286-080		CAP, U 0.01-25
C989	87-012-286-080		CAP, U 0.01-25
C991	87-012-176-080		CAP 15P
C992	87-012-176-080		CAP 15P
C993	87-012-274-080		CHIP CAP,U 1000P-50B
C995	87-012-274-080		CHIP CAP,U 1000P-50B
C997	87-010-831-080		C-CAP,U,0.1-16F
C998	87-A12-071-080		CAP,E 47-25 SMG
C999	87-A11-155-080		CAP,TC U 0.01-16 Z F
CF831	87-008-423-010		FLTR, CF SFE10.7MS3G-A
CF832	82-785-747-010		CF MS2 GHY R
CN501	87-099-564-010		CONN,4P V TUC-P4P-131
CN601	87-099-719-010		CONN,30P TYK-B(X)
CN602	87-099-194-010		CONN,6P V BLK 6216
CN605	87-A61-108-010		CONN,5P V TID-A
CNA1	8A-NF6-646-010		CONN ASSY,9P TID-A(460)
FFC602	88-906-401-110		FF-CABLE,6P 1.25
FFE831	A8-6ZA-19H-030		6ZA-1 FEMENM
J203	87-A60-238-010		TERMINAL,SP 4P (MSC)
J204	87-A60-244-010		JACK,PIN 1P BLK W/O SW
J205	87-A60-881-010		JACK,PIN 2P MSP 242V05 PBSN
J602	87-A60-885-010		JACK,PIN 6P R/W MSC
J832	87-A60-403-010		TERMINAL,ANT PAL 2P HSP-312V05
JR123	87-A10-596-080		C-CAP,S 100P-100 J CH
JR124	87-A10-596-080		C-CAP,S 100P-100 J CH
L201	87-A50-610-010		COIL,1UH K(MDEC)
L202	87-A50-610-010		COIL,1UH K(MDEC)
L801	87-A50-608-010		COIL,FM DET-N(TOK)
L802	87-A91-551-010		FLTR,PCFJZH-450 L(TOK)
L811	87-005-847-080		COIL,2.2UH K CECS
L832	87-005-847-080		COIL,2.2UH(CECS)
L861	87-005-847-080		COIL,2.2UH K CECS
L941	87-A50-020-010		COIL,ANT LW(COI) 252KHZ
L942	87-A50-019-010		COIL,OSC LW(COI) 856KHZ
L951	8A-NF8-668-010		COIL,AM PACK 2(TOK)
R129	87-A00-262-080		RES,M/F 0.15-2W J
R130	87-A00-262-080		RES,M/F 0.15-2W J
R131	87-A00-262-080		RES,M/F 0.15-2W J
R132	87-A00-262-080		RES,M/F 0.15-2W J
R790	87-012-286-080		CAP, U 0.01-25
R991	87-012-195-080		C-CAP,U 100P-50CH
R993	87-012-195-080		C-CAP,U 100P-50CH
R995	87-012-195-080		C-CAP,U 100P-50CH
TC942	87-A91-774-080		TRIMMER,PLY 30P 6.8X5.4 CDYL
TH101	87-A91-042-080		C-THMS,100K 55001
TH102	87-A91-042-080		C-THMS,100K 55001
WH1	87-A90-510-010		HLDR,WIRE 2.5-9P

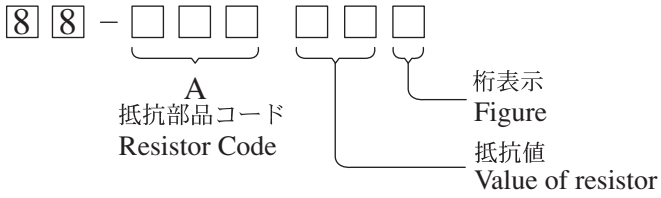
REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
X862	87-A70-307-010		VIB,XTAL 4.332MHZ CSA-309ST
X992	87-A70-306-010		VIB,XTAL 4.500MHZ CSA-309ST
FRONT C.B			
C141	87-012-278-080		C-CAP,U 2200P-50 B
C190	87-012-271-080		CAP, U 560P-50
C191	87-012-195-080		C-CAP,U 100P-50CH
C193	87-012-271-080		CAP, U 560P-50
C194	87-012-195-080		C-CAP,U 100P-50CH
C315	87-010-759-080		C-CAP,U, 0.1-25F
C441	87-010-412-040		CAP,E 10-25 5L
C503	87-010-112-040		CAP,E 100-16 M 11L SME
C504	87-016-471-040		CAP,E 10-50 K SME
C621	87-010-405-040		CAP,E 10-50 M 11L SME
C622	87-010-759-080		C-CAP,U, 0.1-25F
C623	87-012-188-080		C-CAP,U 47P-50 CH
C624	87-012-188-080		C-CAP,U 47P-50 CH
C625	87-012-188-080		C-CAP,U 47P-50 CH
C703	87-010-759-080		C-CAP,U, 0.1-25F
C704	87-010-759-080		C-CAP,U, 0.1-25F
C705	87-010-759-080		C-CAP,U, 0.1-25F
C706	87-010-759-080		C-CAP,U, 0.1-25F
C707	87-010-759-080		C-CAP,U, 0.1-25F
CN101	87-099-720-010		CONN,30P BLK TYK-B(P)
CN103	87-099-201-010		CONN,8P H BLK 6216
CN141	87-A60-667-010		CONN,3P H 2MM JMT
CN401	87-099-212-010		CONN,5P V BLK 6216
CN502	87-099-209-010		CONN,4P 6216H
CN603	87-A61-361-010		CONN,19P V GRY FMN-BTK
CN604	87-A61-385-010		CONN,21P H GRY FMN-SSTK
FFC103	88-908-451-110		FF-CABLE,8P 1.25 450MM
LED140	87-A40-266-080		LED,SLH-56VCT31 RED
LED672	87-A40-809-040		LED,LTL-307KK PGRN
LED673	87-A40-809-040		LED,LTL-307KK PGRN
LED674	87-A40-809-040		LED,LTL-307KK PGRN
LED675	87-A40-809-040		LED,LTL-307KK PGRN
LED676	87-A40-809-040		LED,LTL-307KK PGRN
LED677	87-A40-809-040		LED,LTL-307KK PGRN
S301	87-A90-095-080		SW,TACT EVQ11G04M
S302	87-A90-095-080		SW,TACT EVQ11G04M
S303	87-A90-095-080		SW,TACT EVQ11G04M
S304	87-A90-095-080		SW,TACT EVQ11G04M
SW162	87-A92-249-010		SW,RTRY EC12E24704-30MM
SW163	87-A92-113-010		SW,RTRY EC12E12504 30MM
X201	87-XMN-602-010		VIB,PIEZO PKM13EPY
LCD C.B			
C151	87-A10-189-040		CAP,E 220-10
C154	87-A10-592-080		C-CAP,S 0.015-50 J B
C155	87-012-176-080		CAP 15P
C156	87-012-195-080		C-CAP,U 100P-50CH
C157	87-012-198-080		CAP 180P
C159	87-A10-353-080		C-CAP,U0.22-10KB
C165	87-012-336-080		C-CAP,U 330P-50 J SL
C166	87-010-075-040		CAP,E 10-16 5L
C170	87-010-759-080		C-CAP,U, 0.1-25F
C171	87-016-114-080		C-CAP,U0.01-25B
C172	87-010-759-080		C-CAP,U, 0.1-25F
C175	87-010-759-080		C-CAP,U, 0.1-25F
C176	87-012-274-080		CHIP CAP,U 1000P-50B
C177	87-010-194-080		CAP, CHIP 0.047
C180	87-010-759-080		C-CAP,U, 0.1-25F
C192	87-010-154-080		C-CAP,S 10P-50 D CH GRM
C193	87-018-209-080		CAP, TC U 0.1-50 Z F UP050
C195	87-A10-207-080		CAP, TC U 0.01-50 K B UP050
CN605	87-A61-361-010		CONN,19P V GRY FMN-BTK
CN606	87-A61-090-010		CONN,21P V GRY FMN-BTK

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
FB110	87-008-372-080		FILTER, EMI BL OIRNI
FC111	87-033-213-080		FUSE CLAMP, PFC5000
FC112	87-033-213-080		FUSE CLAMP, PFC5000
FFC605	8B-DJW-632-010		FF-CABLE,19P 1.0 220MM
FFC606	8B-DJW-631-010		FF-CABLE,21P 1.0 180MM
L151	87-A50-657-010		COIL,CLK 9.43MHZ (TOKO)7KLY
LCD101	8B-DJW-616-010		LCD,AIW4279-30P1N
LED691	87-A92-078-010		LED,SELU1D10CXM-SLF38 GR
LED692	87-A92-078-010		LED,SELU1D10CXM-SLF38 GR
LED693	87-A92-078-010		LED,SELU1D10CXM-SLF38 GR
PT C.B			
C1	87-018-209-080		CAP, TC U 0.1-50Z F UP050
CN1	87-A61-110-010		CONN,9P V TID-A
⚠ F1	87-A91-219-010		FUSE,5A 250V T 50T
⚠ FC1	87-033-147-010		FUSE CLAMP,MT-20
⚠ FC2	87-033-147-010		FUSE CLAMP,MT-20
⚠ PT1	8B-NFW-602-010		PT,BNF-29 EZ
⚠ PT2	8B-MA6-675-010		PT,SUB BMA E (VRK)
⚠ RY2	87-A91-418-010		RELAY,AC12V G5PA-1-M
⚠ RY3	87-A91-418-010		RELAY,AC12V G5PA-1-M
⚠ T1	87-A60-317-010		TERMINAL, 1P MSC
⚠ T2	87-A60-317-010		TERMINAL, 1P MSC
⚠ W2	8A-AR3-651-010		CONN ASSY,2P AC-OUTLET
FAN C.B			
C501	87-010-401-080		CAP,E 1-50 M 11L SME
C502	87-010-260-080		CAP,E 47-25 M 11L SME
C503	87-010-260-080		CAP,E 47-25 M 11L SME
CN502	87-099-553-010		CONN,4P H TUC-P
CN503	87-A60-619-010		CONN,2P V 2MM JMT
HP C.B			
C261	87-010-176-080		C-CAP,S 680P-50 SL
C262	87-010-176-080		C-CAP,S 680P-50 SL
C263	87-012-368-080		C-CAP,S 0.1-50 F
CNA4	8B-NF8-653-010		CONN ASSY,5P TID-A (350)
J160	87-A61-480-010		JACK,DIA6.3 BLK ST W/SW MSC16A
R262	87-A00-440-050		RES,220-1/2W J RP
R263	87-A00-440-050		RES,220-1/2W J RP
R264	87-A00-440-050		RES,220-1/2W J RP
R265	87-A00-440-050		RES,220-1/2W J RP
MOT C.B			
M401	87-045-305-010		MOTOR, RF-500TB
MIC C.B			
C502	87-010-186-080		CAP,CHIP 4700P
C505	87-010-545-040		CAP,E 0.22-50 SME
C506	87-010-320-080		CHIP CAP 68P
C507	87-010-544-040		CAP,E 0.1-50 SME
C508	87-010-544-040		CAP,E 0.1-50 SME
C510	87-010-322-080		C-CAP,S 100P-50 CH
C511	87-A12-065-040		CAP,E 33-16 SMG
C512	87-010-178-080		CHIP CAP 1000P
C513	87-010-196-080		CHIP CAPACITOR,0.1-25
C514	87-010-196-080		CHIP CAPACITOR,0.1-25
C515	87-010-178-080		CHIP CAP 1000P
C516	87-012-140-080		C-CAP,S 470P-50 J CH
C520	87-010-178-080		CHIP CAP 1000P
CN552	87-A60-063-010		CONN,04P V 9604S-04C
FB501	87-008-372-080		FILTER, EMI BL OIRNI
J501	87-A61-243-010		JACK,6.3 BLK MONO W/SW V MSC
VR501	86-NFA-607-010		VR,RTRY 10K15AX1 1 V XV012PVN
W501	8B-NFW-636-010		TERMINAL ASSY,FASTON-ASSY

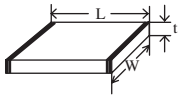
REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
KEY C.B			
CNA3	88-803-033-010		CONN ASSY,3P 300MM
S321	87-A90-095-080		SW,TACT EVQ11G04M
S322	87-A90-095-080		SW,TACT EVQ11G04M
S323	87-A90-095-080		SW,TACT EVQ11G04M
S324	87-A90-095-080		SW,TACT EVQ11G04M
S325	87-A90-095-080		SW,TACT EVQ11G04M
S326	87-A90-095-080		SW,TACT EVQ11G04M
S327	87-A90-095-080		SW,TACT EVQ11G04M
S328	87-A90-095-080		SW,TACT EVQ11G04M
S341	87-A90-095-080		SW,TACT EVQ11G04M
S342	87-A90-095-080		SW,TACT EVQ11G04M
S343	87-A90-095-080		SW,TACT EVQ11G04M
S344	87-A90-095-080		SW,TACT EVQ11G04M
S345	87-A90-095-080		SW,TACT EVQ11G04M
S346	87-A90-095-080		SW,TACT EVQ11G04M
S347	87-A90-095-080		SW,TACT EVQ11G04M
S348	87-A90-095-080		SW,TACT EVQ11G04M
S349	87-A90-095-080		SW,TACT EVQ11G04M
S350	87-A90-095-080		SW,TACT EVQ11G04M
S351	87-A90-095-080		SW,TACT EVQ11G04M
S352	87-A90-095-080		SW,TACT EVQ11G04M
WIN C.B			
CN402	87-A60-082-010		CONN,05P H 9604S-05F
CNA1	84-ZG1-647-010		CONN ASSY,2P
S401	87-A92-128-010		SW,LVR MXS01070MLBO
AC C.B			
⚠ CN2	87-009-448-010		CONN,2P V VT
⚠ J2	87-009-932-010		OUTLET,AC E YKE31-0090

○チップ抵抗部品コード／CHIP RESISTOR PART CODE

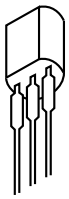
チップ抵抗部品コードの成り立ち
Chip Resistor Part Coding



チップ抵抗
Chip resistor

容量 Wattage	種類 Type	許容誤差 Tolerance	記号 Symbol	寸法／Dimensions (mm) 外形／Form	L	W	t	抵抗コード : A Resistor Code : A
1/16W	1005	± 5%	CJ		1.0	0.5	0.35	104
1/16W	1608	± 5%	CJ		1.6	0.8	0.45	108
1/10W	2125	± 5%	CJ		2	1.25	0.45	118
1/8W	3216	± 5%	CJ		3.2	1.6	0.55	128

TRANSISTOR ILLUSTRATION



CSD655E
KTC3198GR

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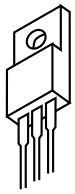
2SA1980G
2SC5342Y
CC5551



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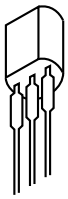

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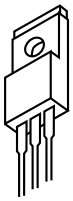

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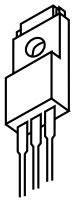
2SD2642



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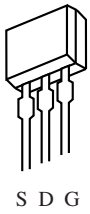

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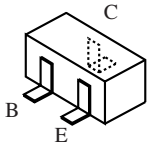

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2SC2714O
2SC3052F
CSD1306E
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KRA102S
KRA107S
KRC107S
RT1N144C
RT1P141C
SBT5401F
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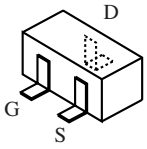
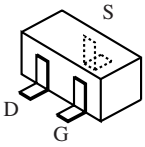


2SK2158



2SK360E

32 31 30 29 28 27 26 25 24 23 22 21 20 19 18 17 16 15 14 13 12 11 10 9 8 7 6 5 4 3 2 1

A B C D E F G H I J K L M N O P Q R S T U

A MAIN C.B

J832 ANTENNA

MW/LW LOOP

FM 75Ω (COAXIAL)

J602 VIDEO/AUX R L MD R L LINE OUT R L

TO CD MECHANISM BZG-5 (FFC602)

J204 SUB WOOFER

J205 SURROUND SPEAKERS R L

TO PT C.B CN001 (CNA001)

J203 FRONT SPEAKERS R L SPEAKERS IMP:6Ω

TO FAN C.B CN502

CN501

TO FRONT C.B CN101

CN601

TO HP C.B CNA4

F HP C.B

J160 PHONES

TO MAIN C.B CN605

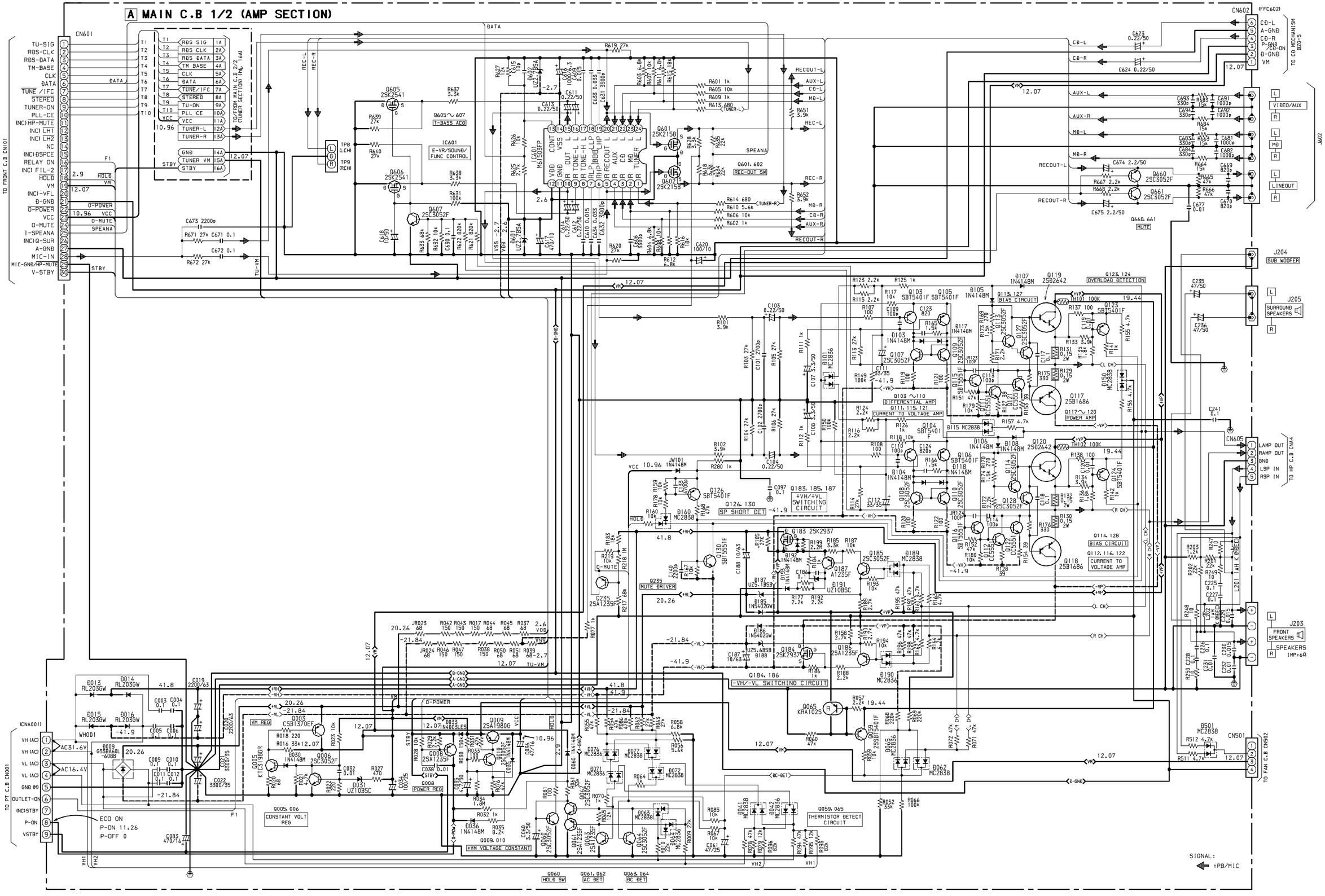
E FAN C.B

TO FAN

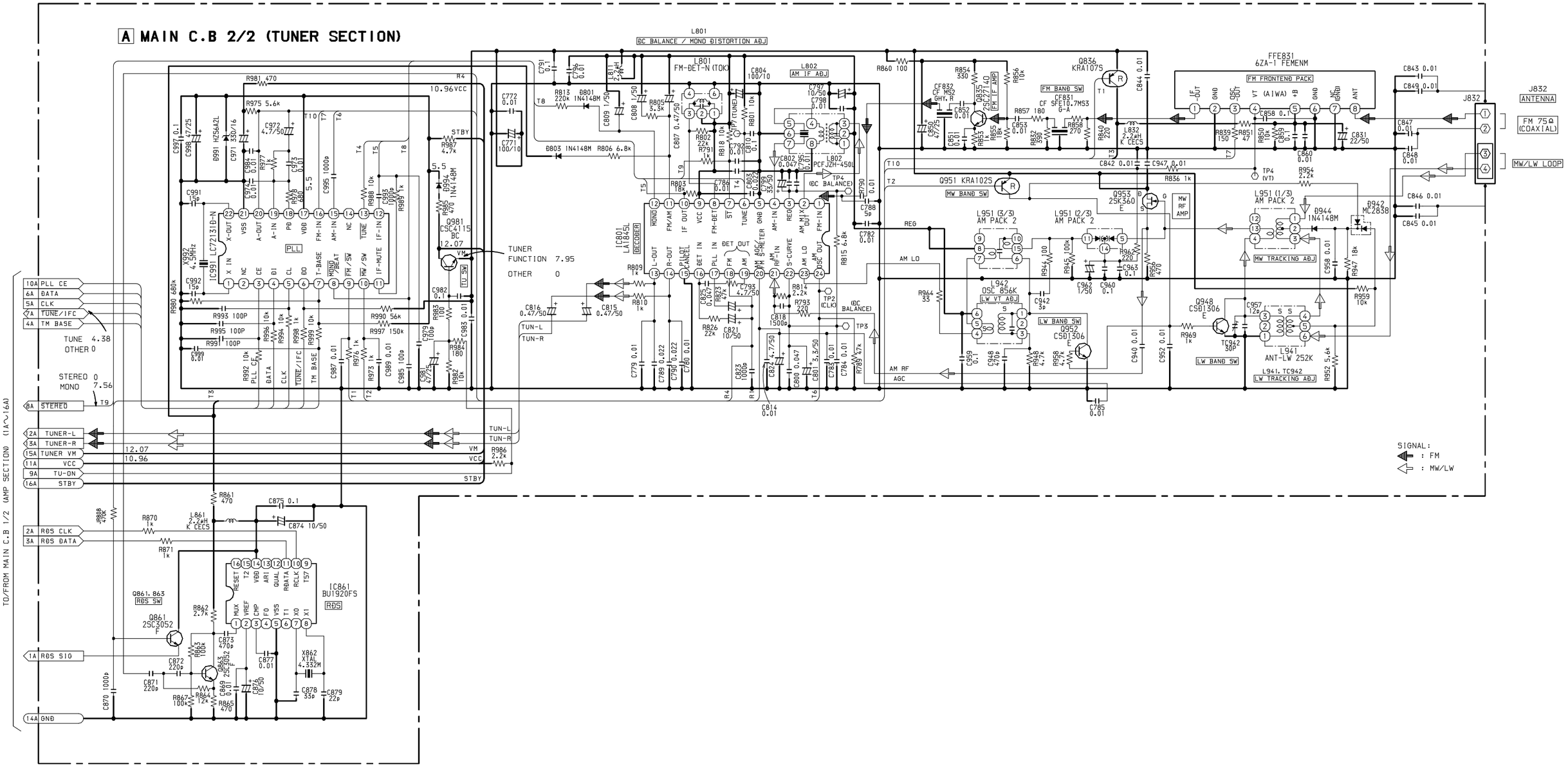
CN503

TO MAIN C.B CN501

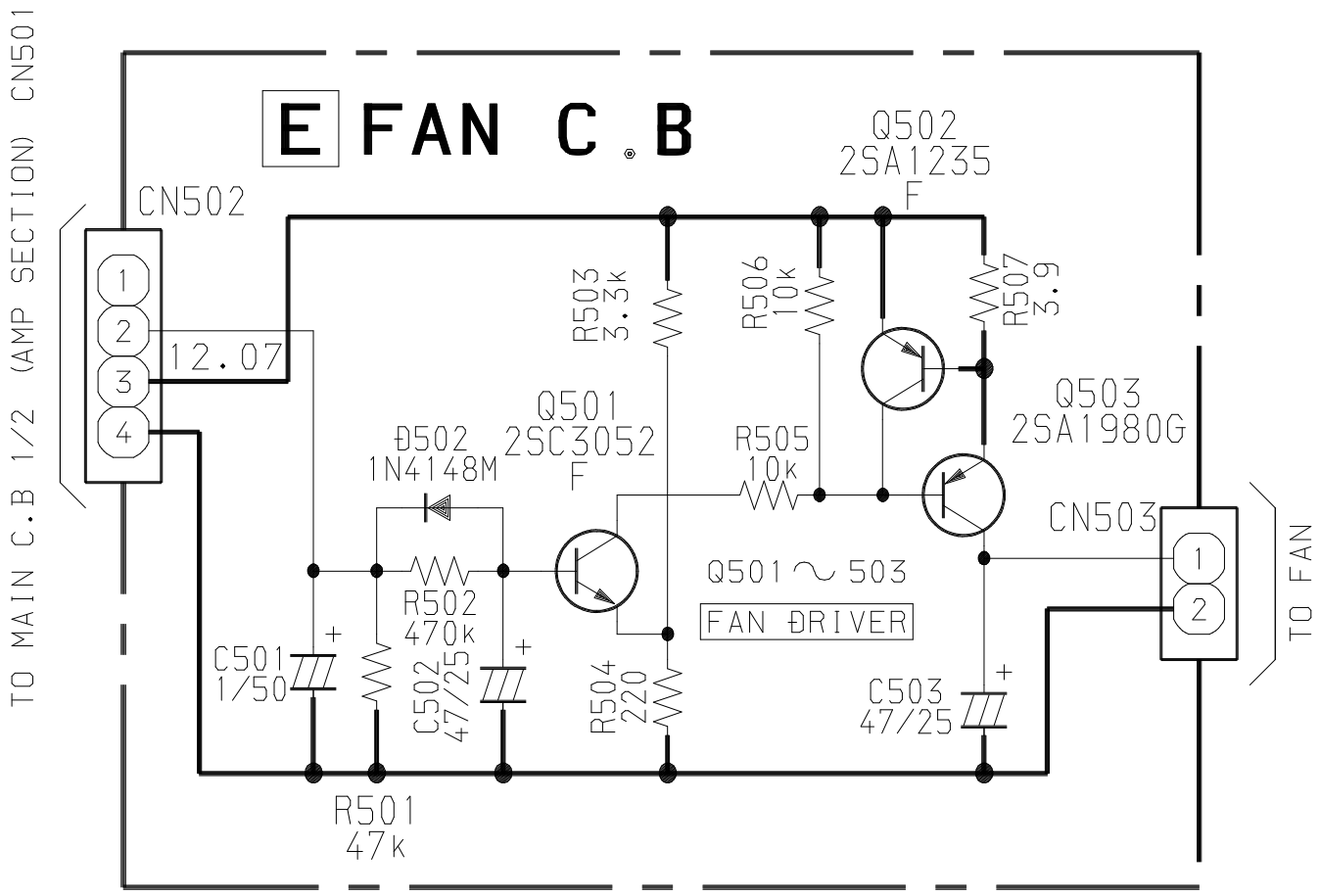
SCHEMATIC DIAGRAM – 1 (MAIN 1/2 : AMP)



SCHEMATIC DIAGRAM – 2 (MAIN 2/2 : TUNER)

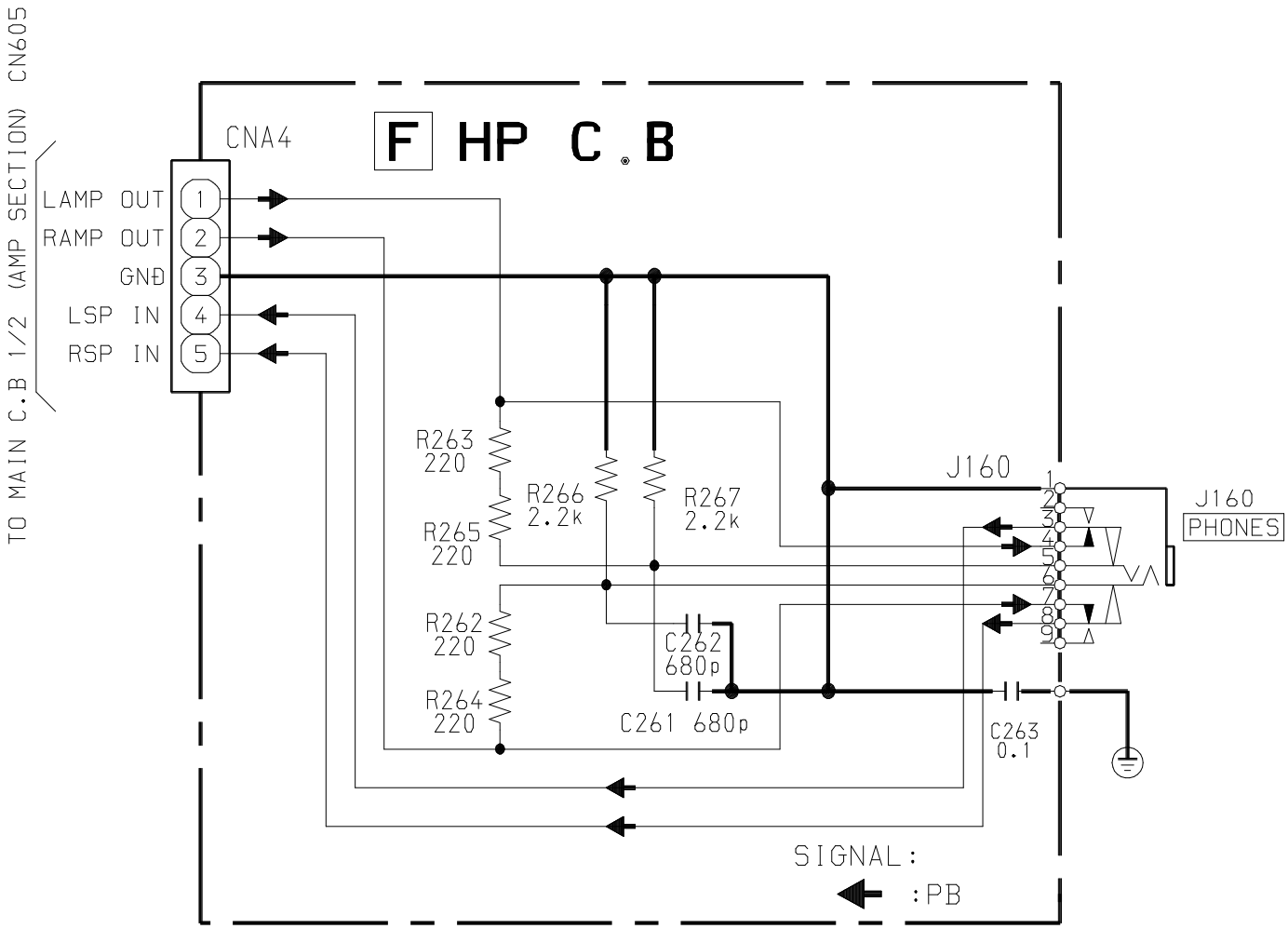


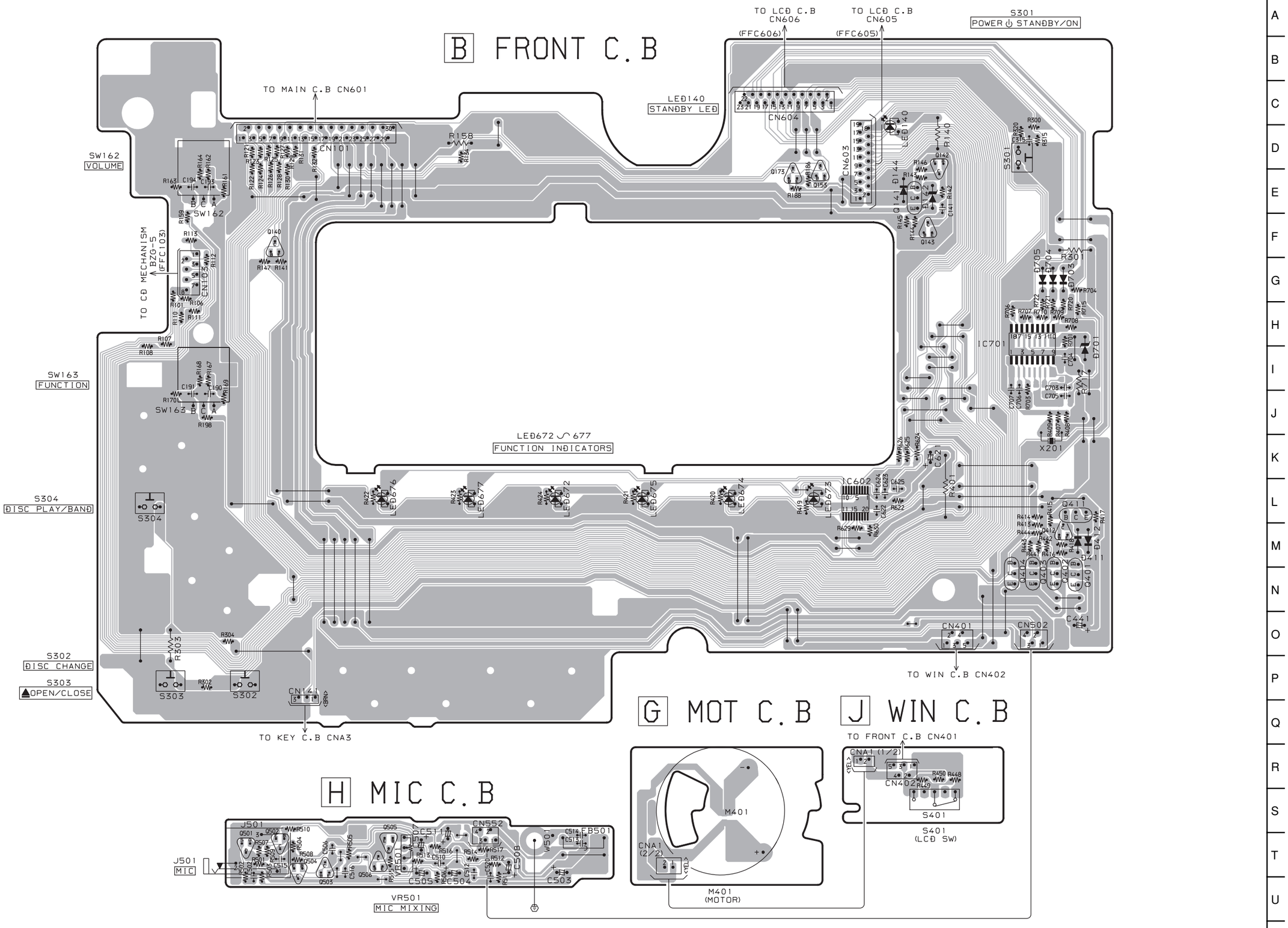
SCHEMATIC DIAGRAM – 3 (FAN)

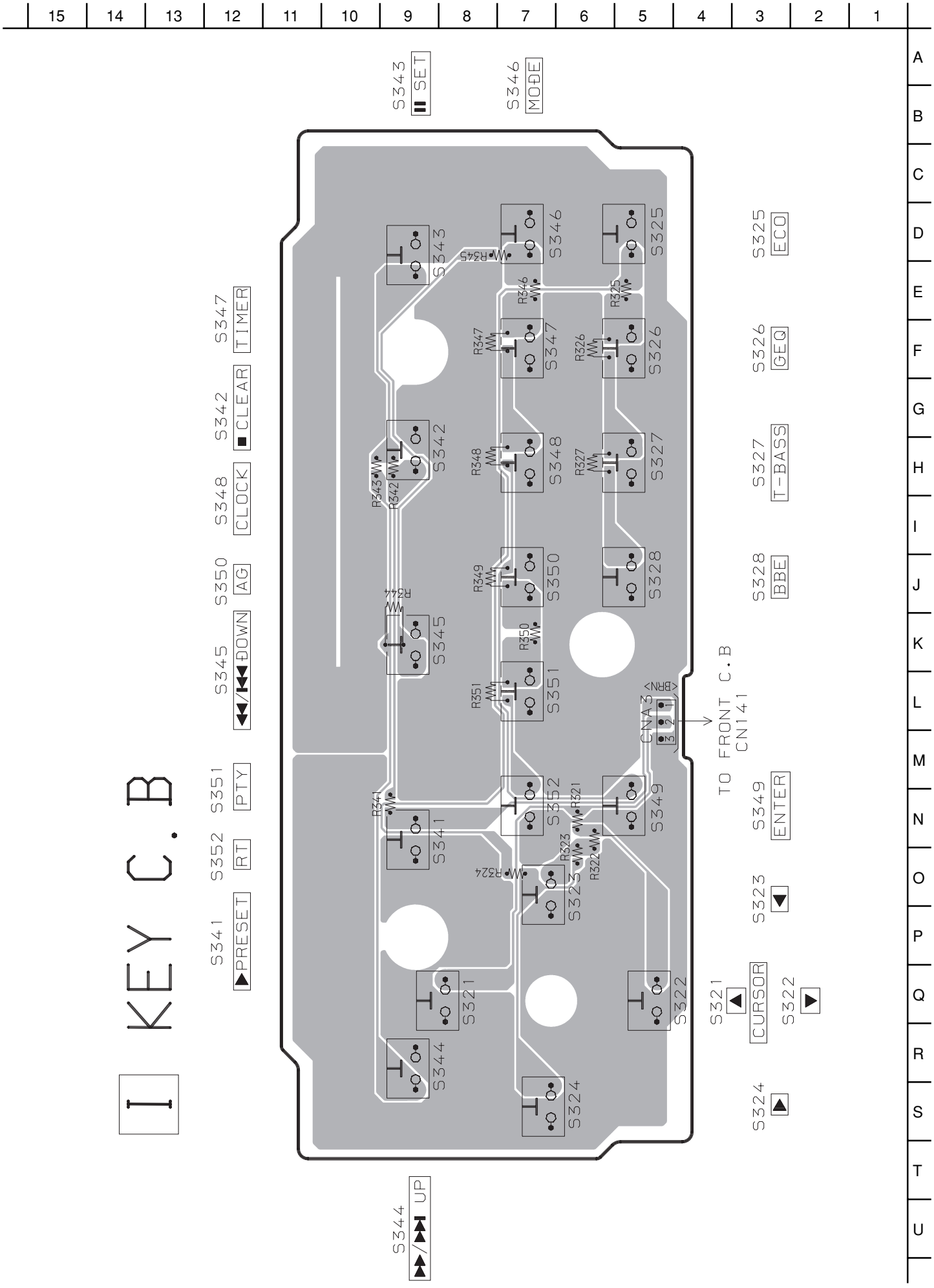


http://getMANUAL.com

SCHEMATIC DIAGRAM – 4 (HP)




B FRONT C.B
TO LCD C.B CN606
(FFC606)
TO LCD C.B CN605
(FFC605)
S301
POWER ⏻ STANDBY/ON
TO MAIN C.B CN601
CN101
LED140
STANDBY LED
CN604
CN603
LED140
Q142
R140
Q144
Q141
R144
R143
R145
R146
Q143
R142
C141
R188
Q153
Q173
R186
S301
R300
R320
R315
SW162
VOLUME
R158
R154
R159
R160
R113
Q140
R147
R141
TO CD MECHANISM BZG-5
(FFC103)
CN103
R112
R101
R110
R111
R106
R107
R108
SW163
FUNCTION
R168
R167
R169
R170
C191
C190
R198
SW163
SW162
C194
C195
R163
R164
R162
R161
R121
R122
R123
R124
R125
R126
R127
R128
R129
R130
R131
R132
R133
R134
D705
D704
D703
R301
R704
R706
R707
R702
R710
R709
R708
R715
R720
R722
IC701
D701
R711
C701
C702
C703
C705
C707
C706
R703
R705
R409
R407
R408
X201
LED672 ∽ 677
FUNCTION INDICATORS
LED676
LED677
LED672
LED675
LED674
LED673
R422
R423
R424
R421
R420
R419
IC602
C624
C623
C625
C622
R622
R621
R629
R630
C621
R401
R414
R413
R444
R415
R417
D411
D412
D413
Q411
Q412
Q413
Q401
Q402
Q403
Q404
R443
R442
R441
R416
C441
S304
DISC PLAY/BAND
S304
R303
R304
S302
DISC CHANGE
S303
▲OPEN/CLOSE
R302
S303
S302
CN141
CN502
CN401
TO WIN C.B CN402
TO KEY C.B CNA3
G MOT C.B
J WIN C.B
TO FRONT C.B CN401
CNA1 (2/2)
M401
CNA1 (1/2)
CN402
R450
R448
R449
S401
S401
(LCD SW)
M401
(MOTOR)
H MIC C.B
J501
MIC
Q501
Q502
Q503
Q504
Q505
Q506
R510
R507
R504
R508
R501
R502
R505
R506
C506
C516
C515
C504
C505
C501
C502
R513
C510
R516
R514
R517
R512
R511
R509
R503
VR501
MIC MIXING
CN552
W501
C514
C513
EB501
C503


15
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A
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C
D
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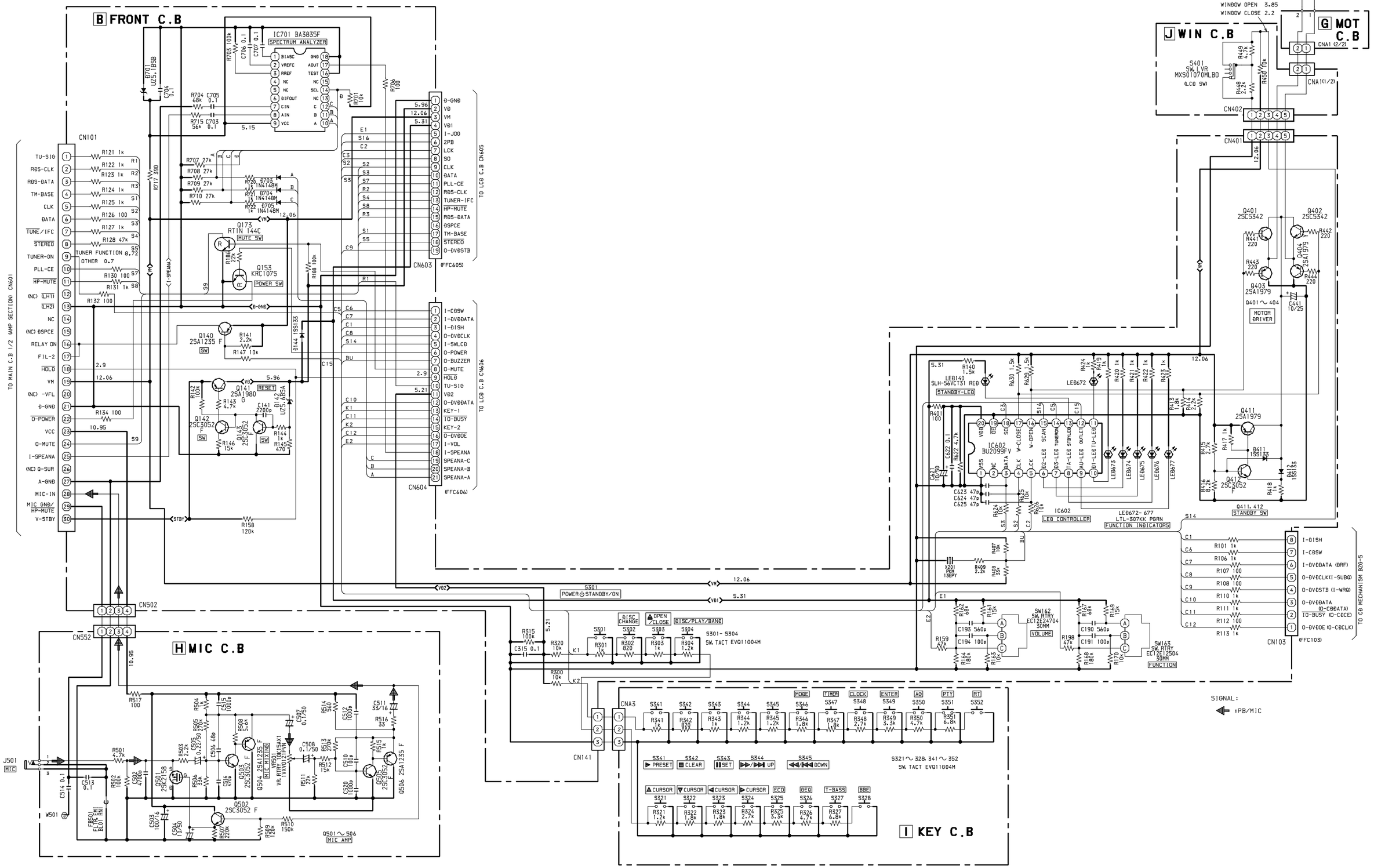
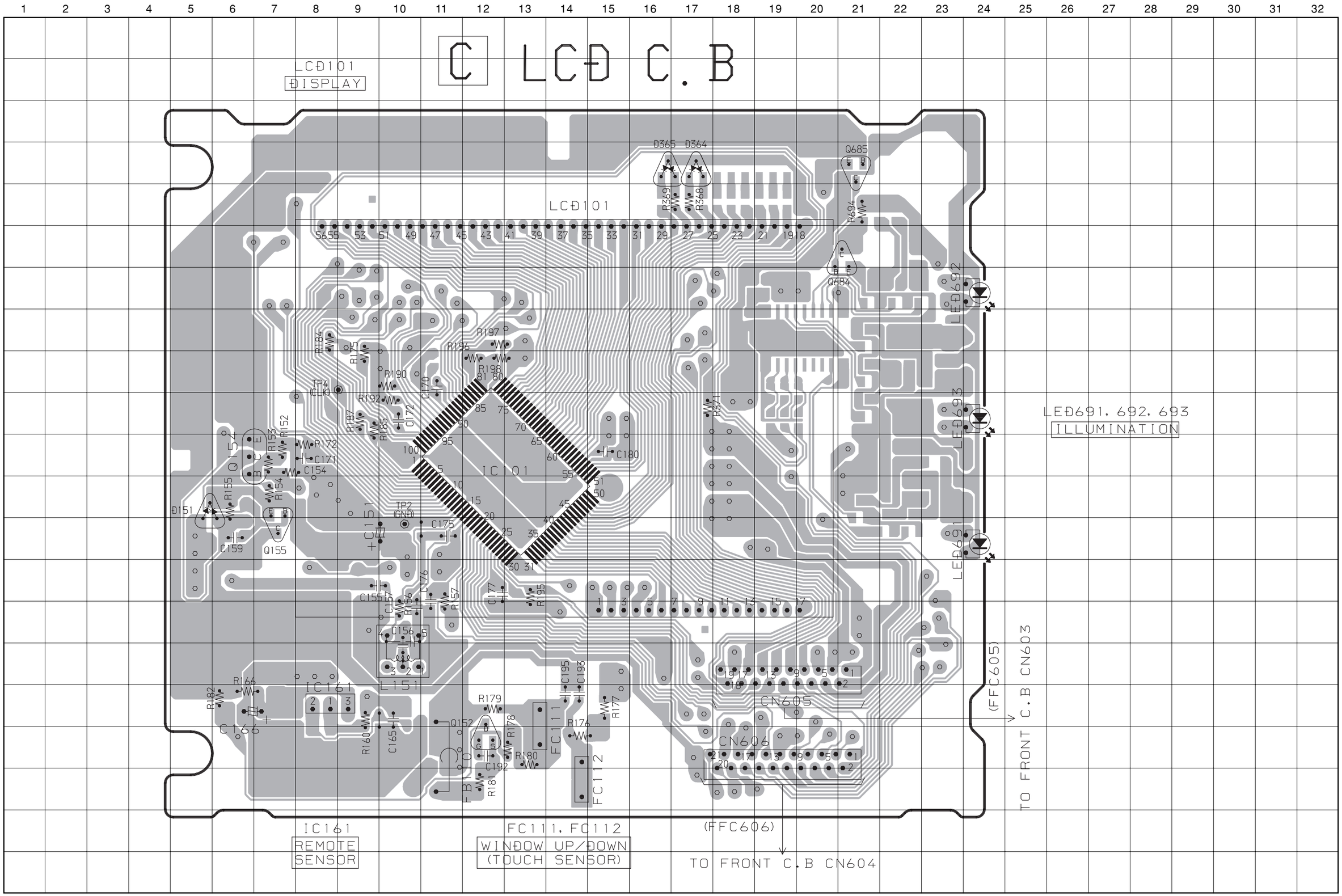
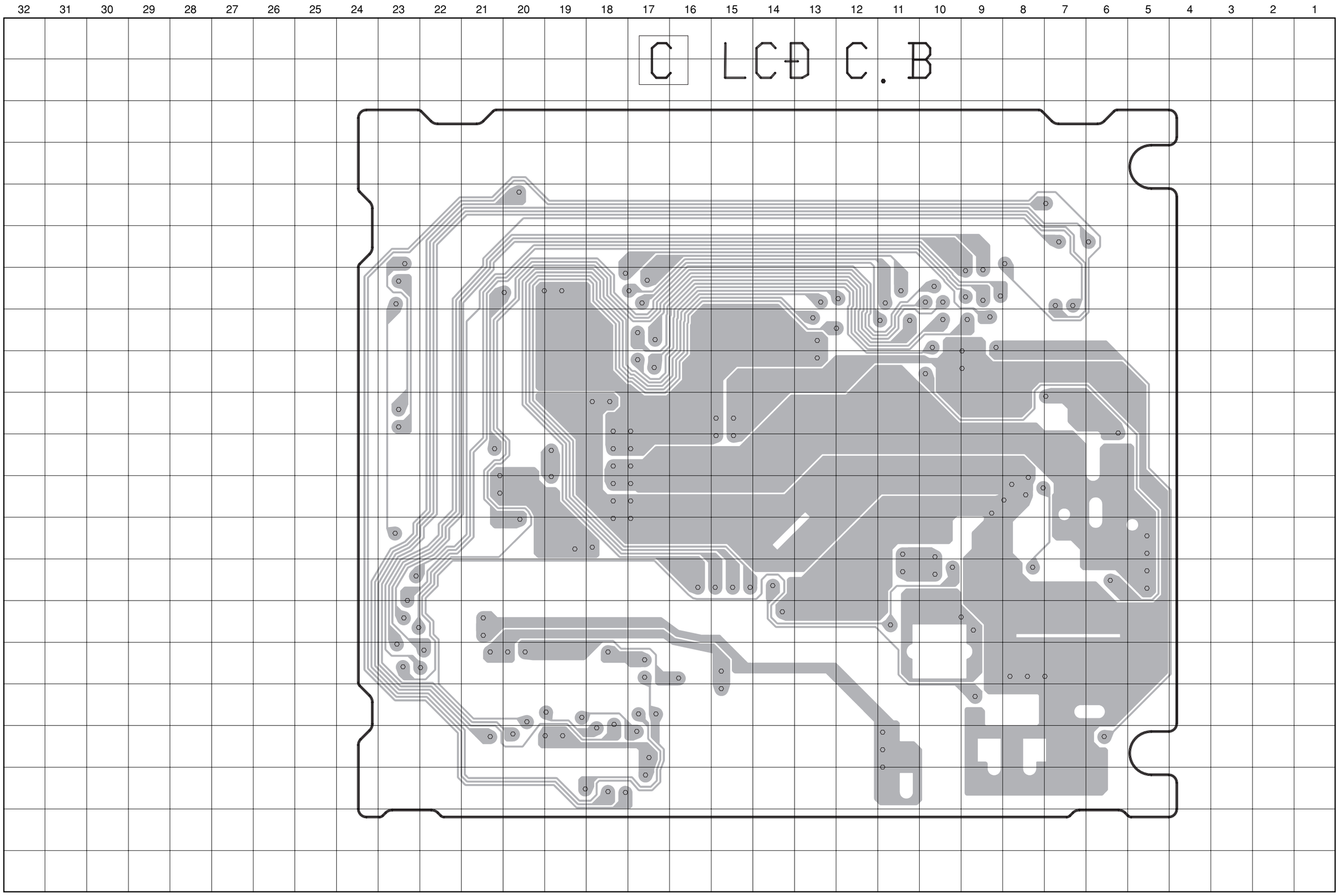
I
J
K
L
M
N
O
P
Q
R
S
T
U
I KEY C.B
S343 SET
S346 MODE
S347 TIMER
S342 CLEAR
S348 CLOCK
S350 AG
S345 DOWN
S351 PTY
S352 RT
S341 PRESET
S344 UP
S325 ECO
S326 GEQ
S327 T-BASS
S328 BBE
S349 ENTER
S323
S321 CURSOR
S322
S324
CNA3
TO FRONT C.B
CN141

SCHEMATIC DIAGRAM – 5 (FRONT / MOT / MIC / KEY / WIN)

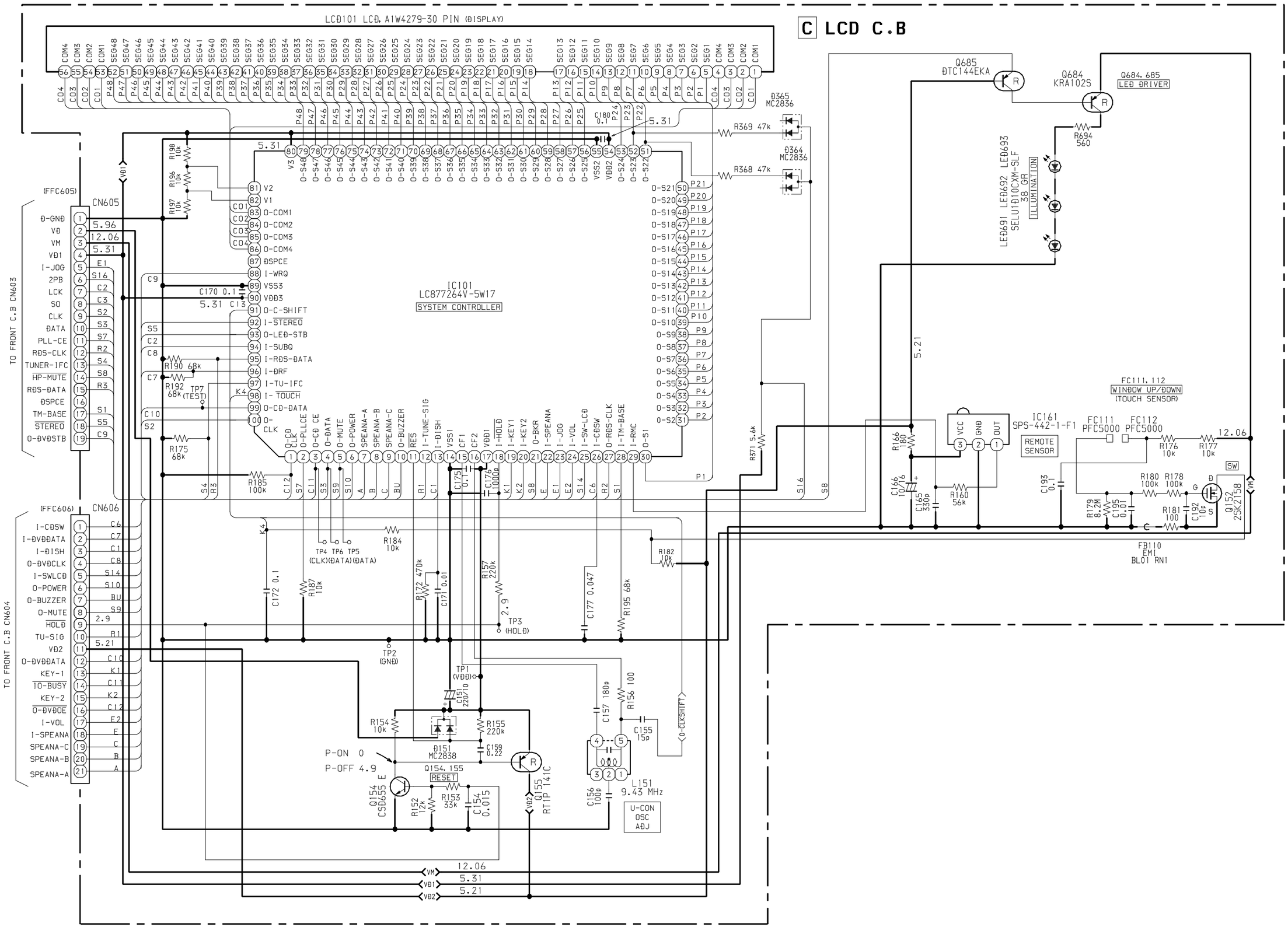


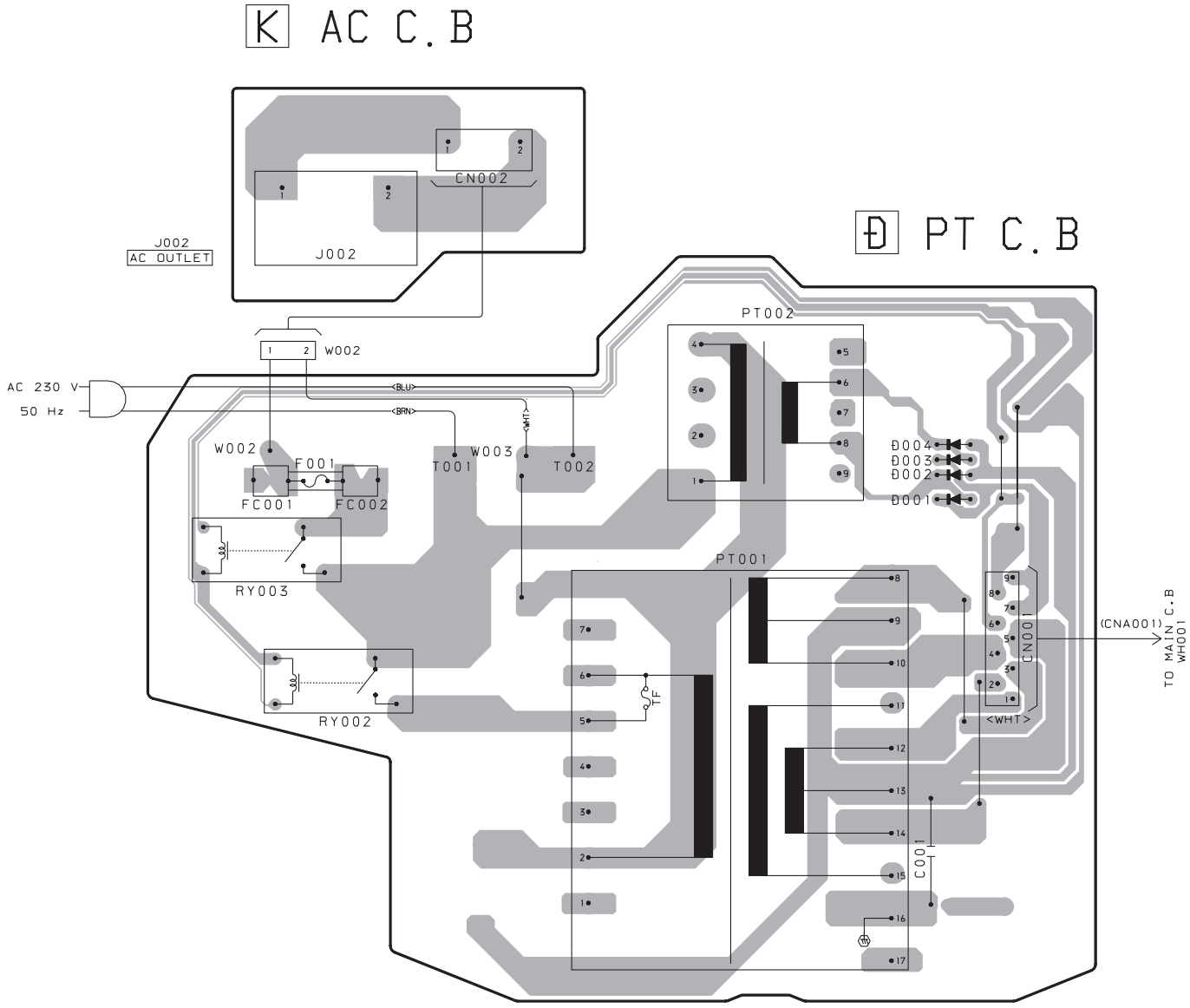

LCD C.B
LCD101
DISPLAY
LCD101
D365
D364
Q685
R369
R368
R694
Q684
LED692
LED693
LED691
LED, 691, 692, 693
ILLUMINATION
IC101
IP4
(CLK)
IP2
(GND)
R184
R175
R197
R196
R198
R190
R192
R187
R185
C170
C172
C180
R371
R153
R152
R172
C171
C154
Q154
R155
R154
D151
C159
Q155
C151
C175
C176
C177
R157
R195
C155
C157
C156
L151
IC161
R166
R182
C166
R160
C165
R179
Q152
R178
R180
C192
R181
B10
FC111
FC112
C195
C193
R177
R176
CN605
CN606
(FFC605)
TO FRONT C.B CN603
IC161
REMOTE
SENSOR
FC111, FC112
WINDOW UP/DOWN
(TOUCH SENSOR)
(FFC606)
TO FRONT C.B CN604

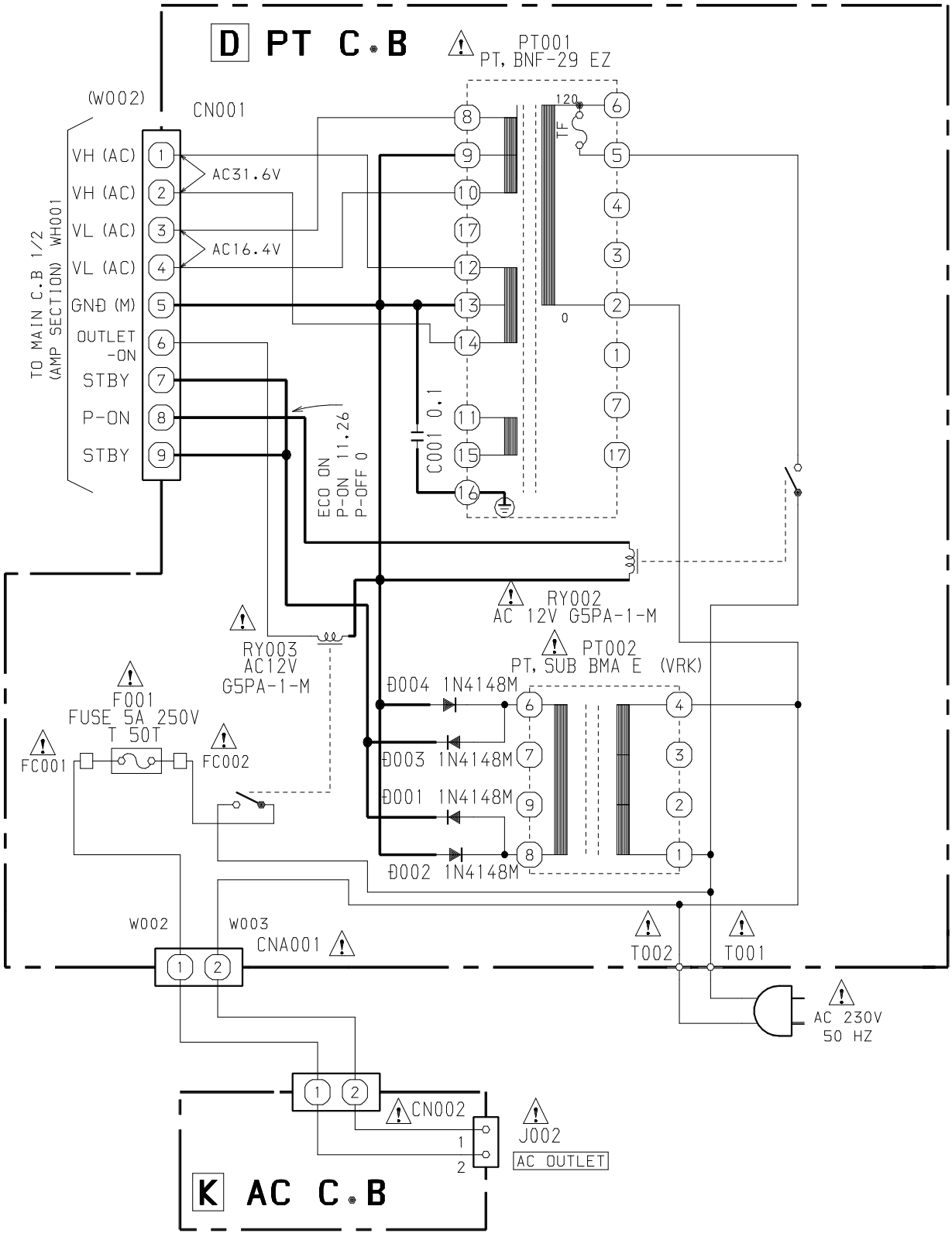
WIRING – 4 (LCD) <2 / 2>



SCHEMATIC DIAGRAM – 6 (LCD)

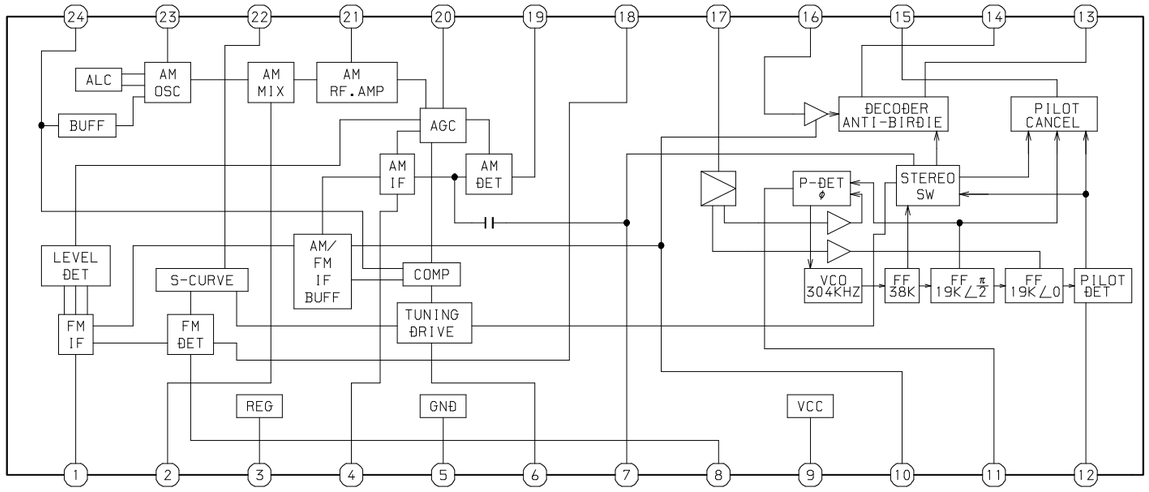



K AC C.B
Đ PT C.B
CN002
J002
J002
AC OUTLET
W002
AC 230 V
50 Hz
<BLU>
<BRN>
<WHT>
W002
F001
FC001
FC002
T001
W003
T002
RY003
RY002
PT002
PT001
Đ004
Đ003
Đ002
Đ001
TF
CN001
<WHT>
(CNA001)
TO MAIN C.B
WH001
C001

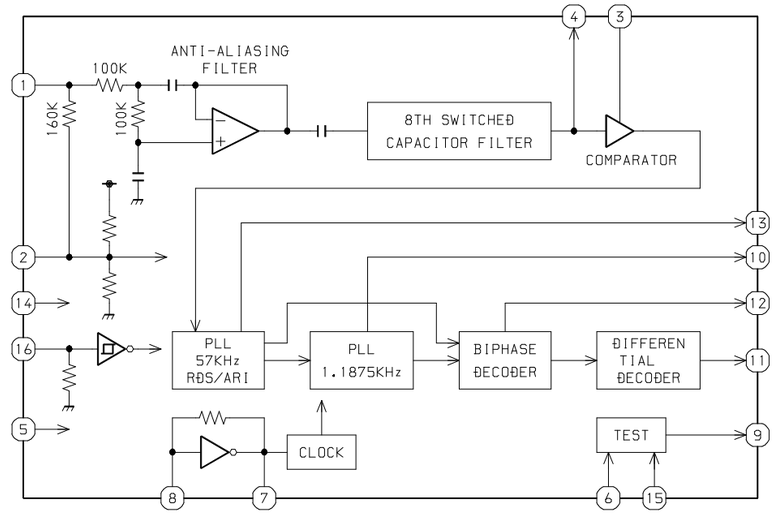

D PT C.B
PT001
PT, BNF-29 EZ
(W002)
CN001
VH (AC)
VH (AC)
VL (AC)
VL (AC)
GND (M)
OUTLET -ON
STBY
P-ON
STBY
AC31.6V
AC16.4V
TO MAIN C.B 1/2 (AMP SECTION) WH001
ECO ON
P-ON 11.26
P-OFF 0
C001 0.1
TF
120
0
RY002
AC 12V G5PA-1-M
RY003
AC12V
G5PA-1-M
PT002
PT, SUB BMA E (VRK)
D004 1N4148M
D003 1N4148M
D001 1N4148M
D002 1N4148M
F001
FUSE 5A 250V
T 50T
FC001
FC002
W002
W003
CNA001
T002
T001
AC 230V
50 HZ
CN002
J002
AC OUTLET
K AC C.B

IC BLOCK DIAGRAM

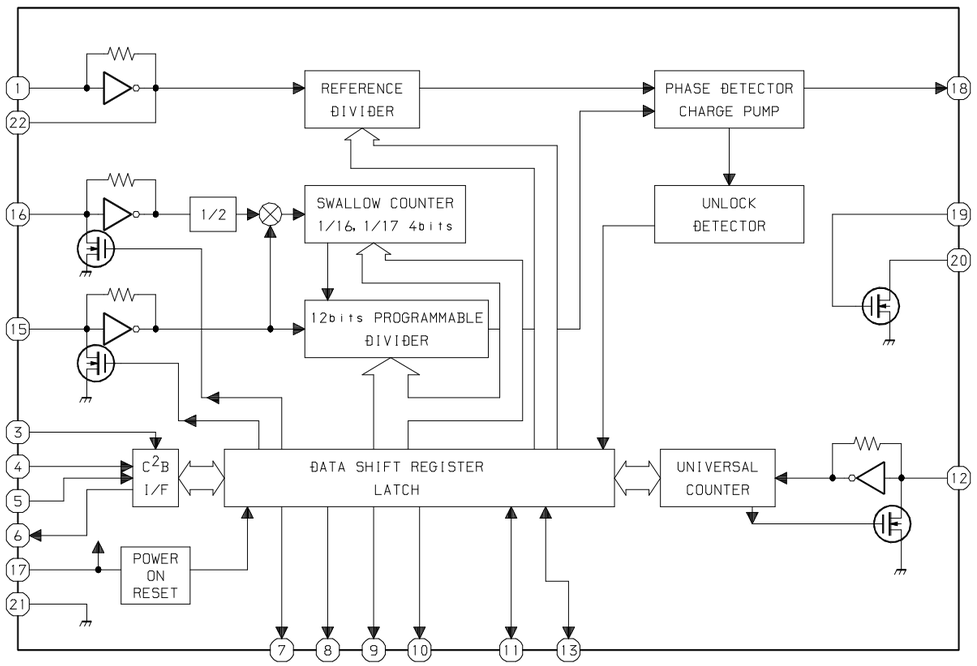
IC, LA1845L



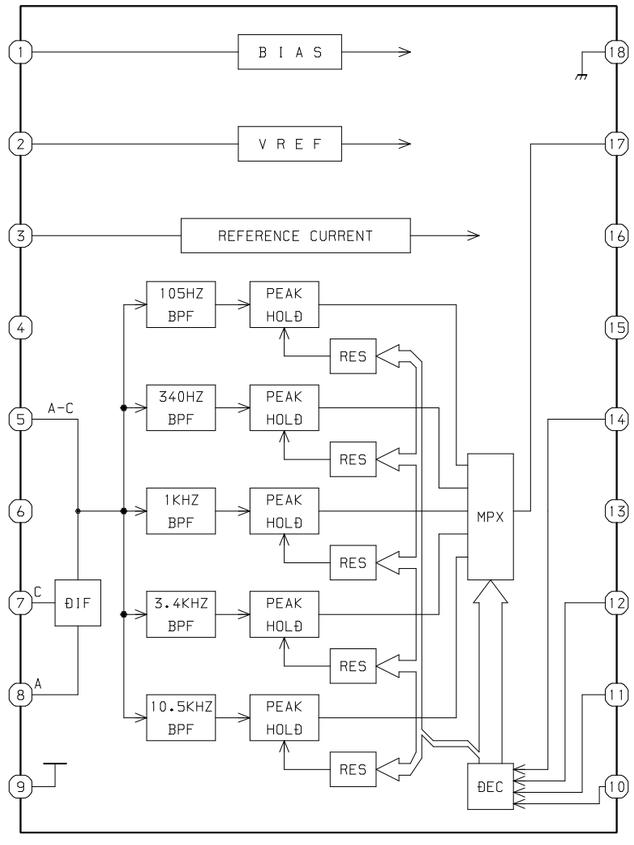
IC, BU1920FS



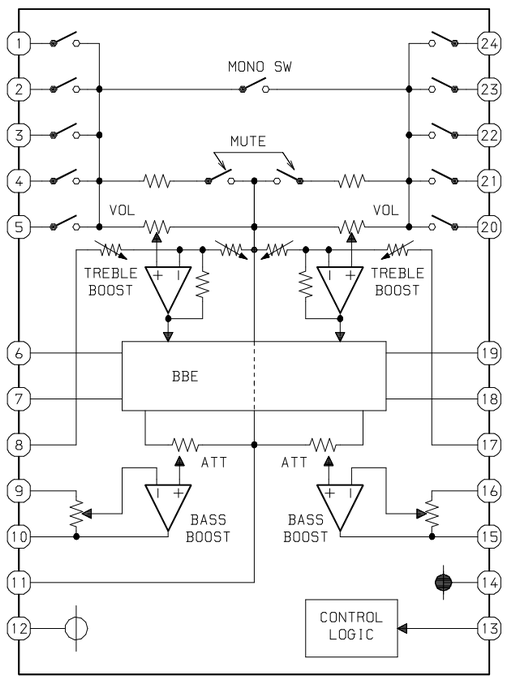
IC, LC72131D-N



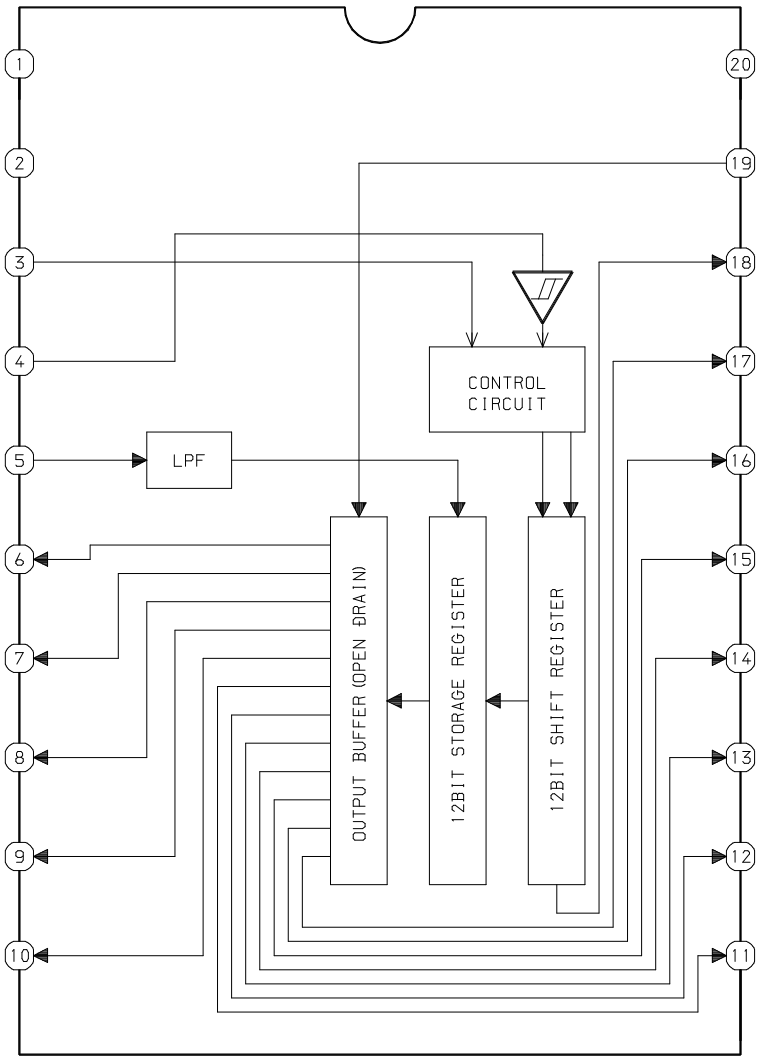
IC, BA3835F



IC, M61503FP



IC, BU2099FV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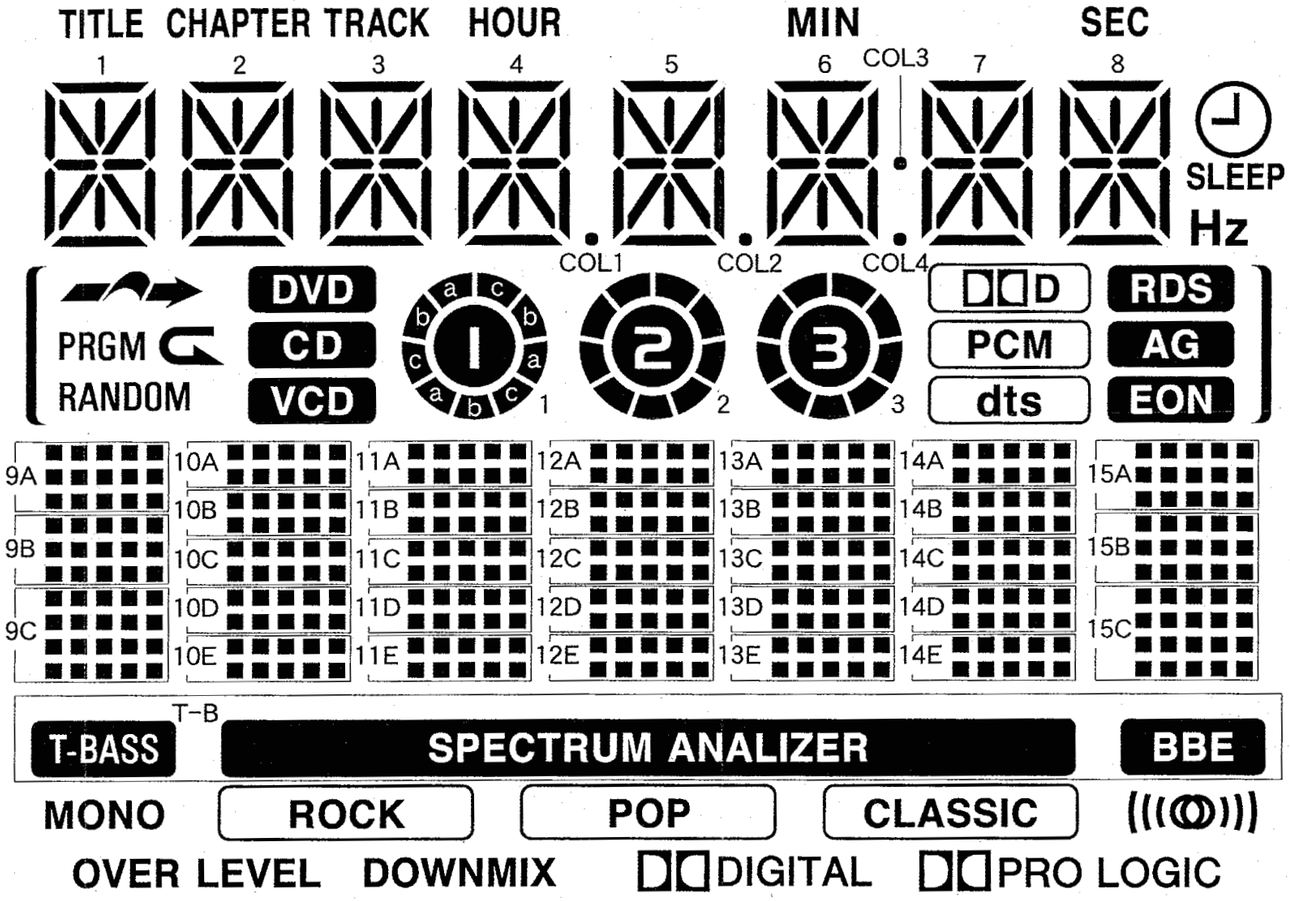
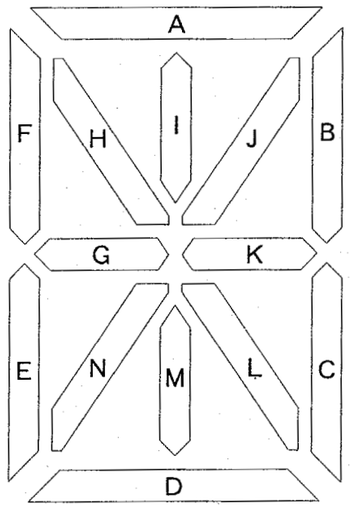
11
CONTROL CIRCUIT
LPF
OUTPUT BUFFER (OPEN DRAIN)
12BIT STORAGE REGISTER
12BIT SHIFT REGISTER

『WIRING TABLE』

No	COM1	COM2	COM3	COM4	No	COM1	COM2	COM3	COM4
1	COM1	– –	– –	– –	29	3I	3J	3K	3L
2	– –	COM2	– –	– –	30	3A	3B	3C	❶
3	– –	– –	COM3	– –	31	4F	4E	4D	HOUR
4	– –	– –	– –	COM4	32	4H	4G	4N	4M
5	– –	dts	PCM	DD D	33	4I	4J	4K	4L
6	15A	15B	15C	14E	34	4A	4B	4C	COL1
7	13E	12E	T-B	11E	35	5F	5E	5D	2-c
8	DD DIGITAL	CLASSIC	POP	DD PRO LOGIC	36	5H	5G	5N	5M
9	OVER LEVEL	ROCK	MONO	DOWNMIX	37	5I	5J	5K	5L
10	9A	9B	9C	10E	38	5A	5B	5C	COL2
11	10A	10B	10C	10D	39	6F	6E	6D	2-b
12	11A	11B	11C	11D	40	6H	6G	6N	6M
13	12A	12B	12C	12D	41	6I	6J	6K	6L
14	13A	13B	13C	13D	42	6A	6B	6C	2-a
15	14A	14B	14C	14D	43	MIN,SEC	COL3	COL4	❷
16	[ ]	EON	AG	RDS	44	7F	7E	7D	3-c
17	RANDOM	VCD	CD	1-c	45	7H	7G	7N	7M
18	PRGM	↳	↱	DVD	46	7I	7J	7K	7L
19	1F	1E	1D	TITLE	47	7A	7B	7C	3-b
20	1H	1G	1N	1M	48	8F	8E	8D	3-a
21	1I	1J	1K	1L	49	8H	8G	8N	8M
22	1A	1B	1C	1-b	50	8I	8J	8K	8L
23	2F	2E	2D	CHAPTER	51	8A	8B	8C	❸
24	2H	2G	2N	2M	52	🕘	SLEEP	Hz	(((◎)))
25	2I	2J	2K	2L	53	COM1	– –	– –	– –
26	2A	2B	2C	1-a	54	– –	COM2	– –	– –
27	3F	3E	3D	TRACK	55	– –	– –	COM3	– –
28	3H	3G	3N	3M	56	– –	– –	– –	COM4

『CHARACTER NAME』



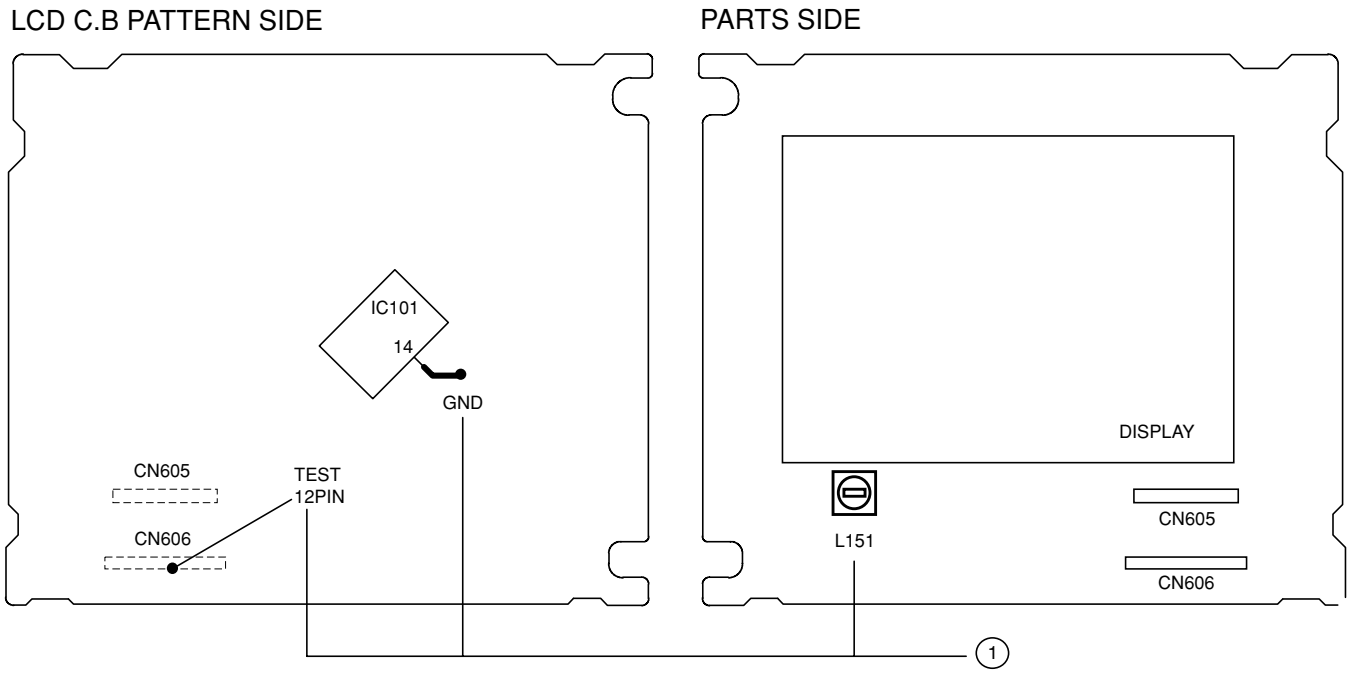


IC DESCRIPTION

IC, LC877264V-5W17

Pin No.	Pin Name	I/O	Description
1	O-CD CLK	O	CD IC control clock output.
2	O-PLLCE	O	Tuner PLL IC chip enable output.
3	O-CD CE	O	Chip enable output for CD.
4	O-DATA	O	Data output for MAIN PWB and shift register IC.
5	O-MUTE	O	System mute ON / $\overline{\text{OFF}}$ output.
6	O-POWER	O	Power control ON/OFF output.
7	SPEANA-A	O	Spectrum analyser BPF switching control A output.
8	SPEANA-B	O	Spectrum analyser BPF switching control B output.
9	SPEANA-C	O	Spectrum analyser BPF switching control C output.
10	O-BUZZER	O	Buzzer control.
11	$\overline{\text{RES}}$	I	Reset input for MICON.
12	I-TUNE-SIG	I	Tuner signal input.
13	I-DISH	I	CD turnable photo sensor input.
14	VSS1	—	Connected to ground.
15	CF1	I	Oscillator circuit input.
16	CF2	O	Oscillator circuit output.
17	VDD1	—	Digital power supply pin.
18	I-$\overline{\text{HOLD}}$	I	Power failure detected input.
19	I-KEY1	I	Key A/D input 1.
20	I-KEY2	I	Key A/D input 2.
21	O-BKR	O	LCD backlight ON / OFF output.
22	I-SPEANA	I	Spectrum analyzer level input.
23	I-JOG	I	Dial jog rotary encoder input.
24	I-VOL	I	Volume rotary encoder input.
25	I-SW-LCD	I	Moving panel mecha switch input.
26	I-CDSW	I	CD mehca switch input.
27	I-RDS-CLK	I	RDS IC clock input.
28	I-TM-BASE	I	Reference clock input for timer switch.
29	I-RMC	I	System remote control signal input. "L" : ACTIVE
30 ~ 53	O-S1 ~ O-S24	O	LCD segment S1 ~ S24 output.
54	VDD2	—	Digital power supply pin.
55	VSS2	—	Connected to ground.
56 ~ 79	O-S25 ~ O-S48	O	LCD segment S25 ~ S48 output.
80	V3	—	LCD bias input.
81	V2	—	LCD bias input.
82	V1	—	LCD bias input.
83 ~ 86	O-COM1 ~ O-COM4	O	LCD driver common.
87	DSPCE	—	Not used.
88	I-WRQ	I	WRQ input for CD.
89	VSS3	—	Connected to ground.
90	VDD3	—	Digital power supply pin.
91	O-C-SHIFT	O	Micon clock shift output.

Pin No.	Pin Name	I/O	Description
92	I-$\overline{\text{STEREO}}$	I	Tuner stereo detect input.
93	O-LED-STB	O	STB signal make clock and data effective.
94	I-SUBQ	I	SUBQ input for CD.
95	I-RDS-DATA	I	RDS IC data input.
96	I-DRF	I	DRF input for CD.
97	I-TU-IFC	I	Tuner 'TUNE' signal and IF count input.
98	I-$\overline{\text{TOUCH}}$	I	Touch sensor input.
99	O-CD-DATA	O	Data output for CD.
100	O-CLK	O	Clock output for MAIN PWB and shift register IC.



1. CLOCK Adjustment

   Requirement

   Measuring device: Frequency counter

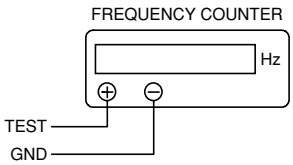
   Test Point: TEST, GND

   (1) While pressing the “DISC CHANGE” button, insert the AC plug.

   (2) Adjust L151 until the frequency counter display 97.257 Hz ± 0.097 Hz.

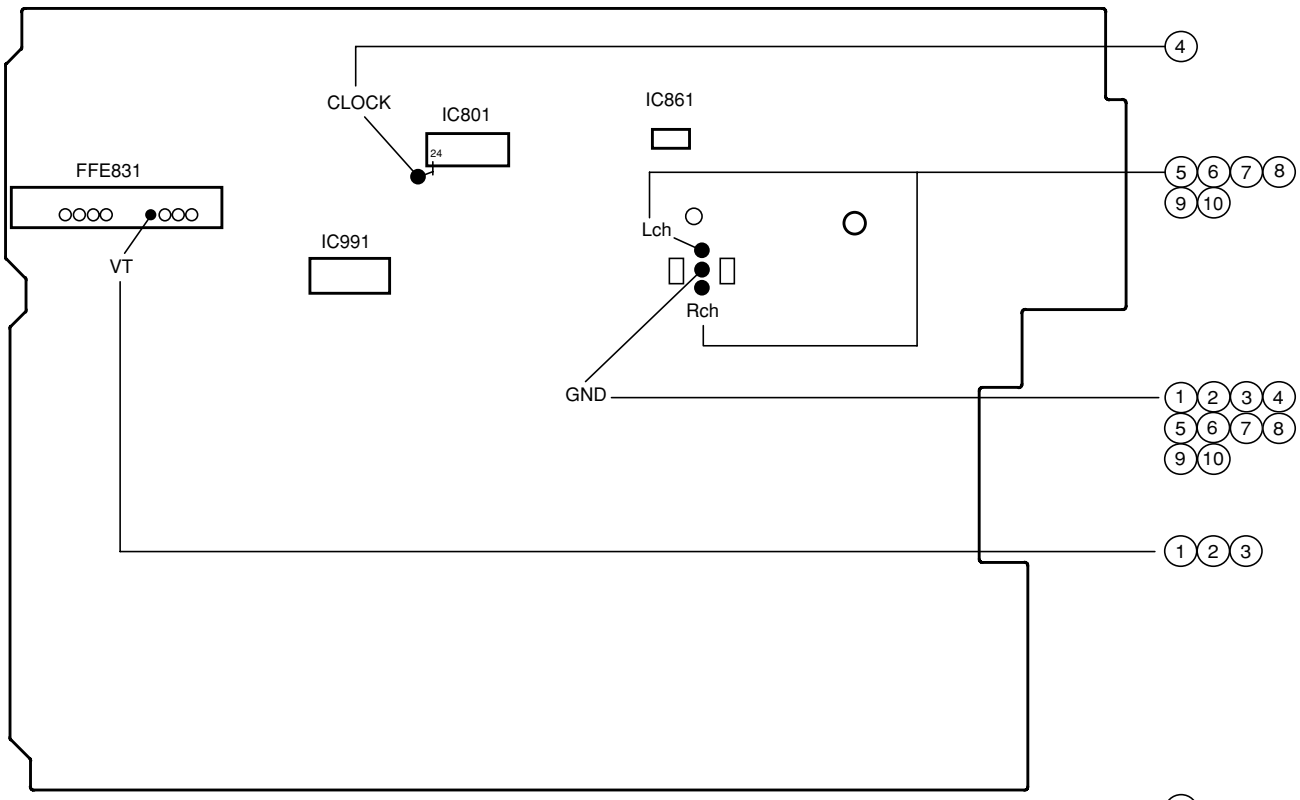
   Note: 97.16 ~ 97.257 ~ 97.354 Hz

   10272 ~ 10.282 ~ 10.292 msec

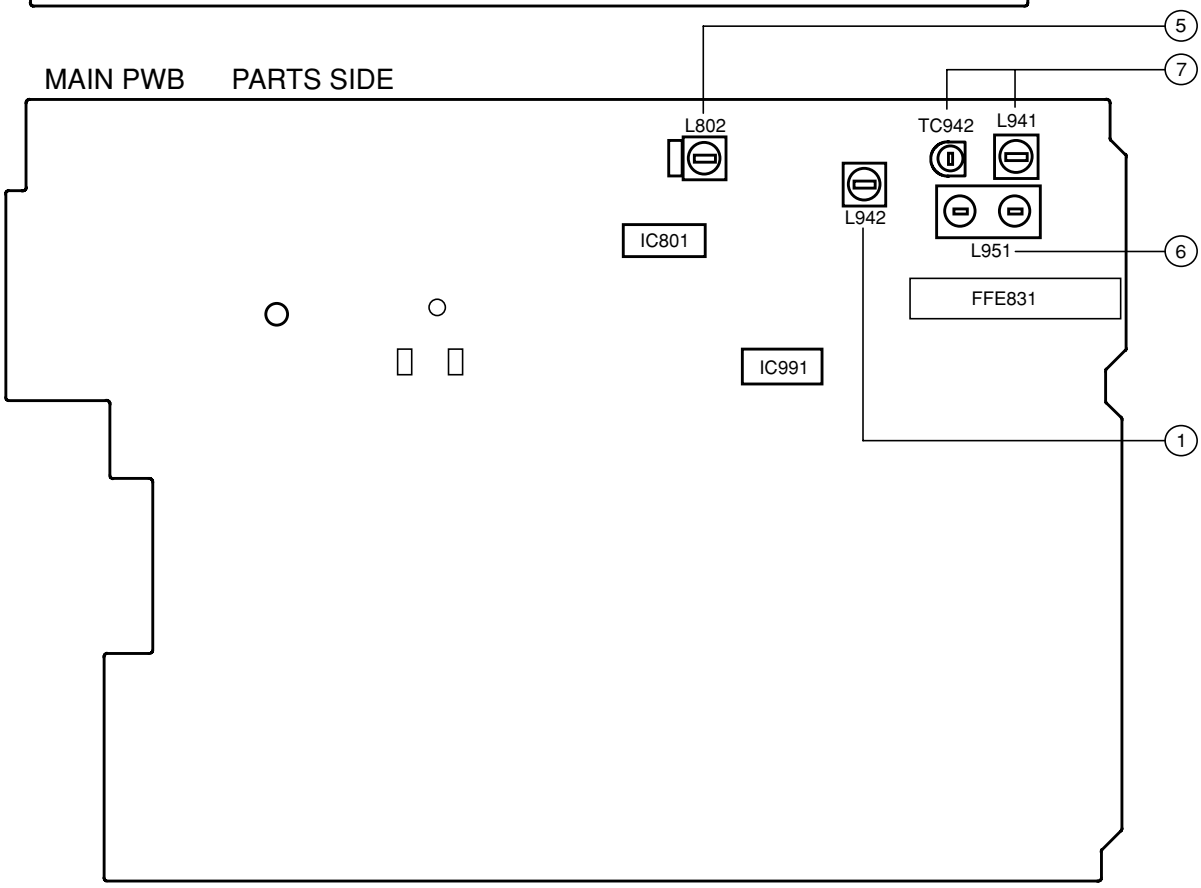


TUNER ADJUSTMENT

MAIN PWB PATTERN SIDE



MAIN PWB PARTS SIDE



1. VT Adjustment (LW)

   Requirement

   Measuring Device: Digital Multimeter

   Test Point: VT, GND

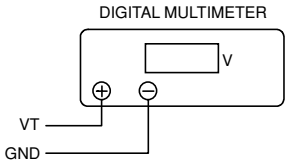
   Adjustment Point: L942

   (1) Adjust the reception frequency of the set to 144 kHz.

   (2) Adjust L942 until the test point voltage (VT) is 1.3 V ± 0.05 V.

   (3) Adjust the reception frequency of the set to 290 kHz.

   (4) Check that the test point (VT) voltage is below 8 V.



2. VT Check (MW)

   Requirement

   Measuring Device: Digital Multimeter

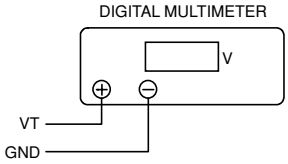
   Test Point: VT, GND

   (1) Adjust the reception frequency of the set to 1602 kHz.

   (2) Check that the test point voltage is below 8 V.

   (3) Adjust the reception frequency of the set to 531 kHz.

   (4) Check that the test point voltage is above 0.6 V.



3. VT Check (FM)

   Requirement

   Measuring Device: Digital Multimeter

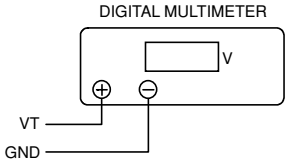
   Test Point: VT, GND

   (1) Adjust the reception frequency of the set to 108.0 kHz.

   (2) Check that the test point voltage is below 8 V.

   (3) Adjust the reception frequency of the set to 87.5 MHz.

   (4) Check that the test point voltage is above 0.6 V.



4. CLOCK Check

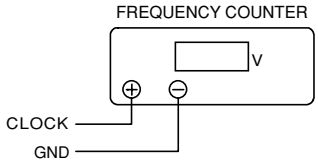
   Requirement

   Measuring Device: Frequency Counter

   Test Point: CLOCK, GND

   (1) Change to MW and adjust the reception frequency of the set to 1602 kHz.

   (2) Check that the test point (CLOCK) frequency is 2052 kHz ± 45 Hz.



<MW/LW Adjustment>

For MW/LW adjustment, do wiring and connection as in the following.

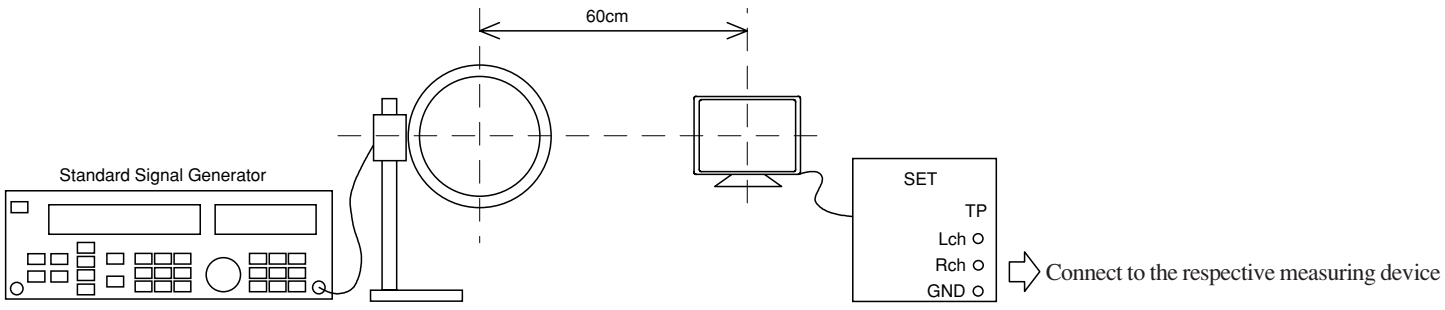
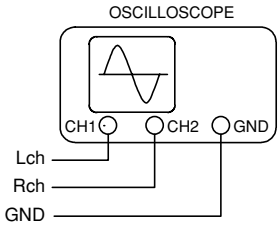


Fig. 2

5. IF adjustment (MW)



Requirement

Measuring Device: Oscilloscope and Millivoltmeter

Test Point: Lch, Rch, GND

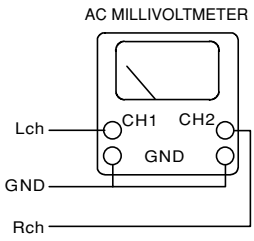
(1) Adjust the setting of Standard Signal Generator (hereinafter S.S.G) to 450 kHz of 30% variation.

(2) Adjust the reception frequency of the set to 999KHz.

(3) While looking at the waveform on the oscilloscope, reduce the output level all the way.

(4) Adjust L802 until the value of the millivoltmeter reaches the maximum.

6. Tracking Adjustment (MW)



Requirement

Measuring Device: Oscilloscope and millivoltmeter

Test Point: Lch, Rch, GND

(1) Adjust the S.S.G setting to 999 kHz of 30% variation.

(2) While looking at the waveform on the oscilloscope, reduce the output level all the way.

(3) Adjust L951 until the value of the millivoltmeter reaches the maximum.

7. Tracking Adjustment (LW)

Requirement

Measuring Device: Oscilloscope and millivoltmeter

Test Point: Lch, Rch, GND

(1) Adjust the S.S.G setting to 144 kHz, 30% variation and reduce the output level all the way. (approximately 90 dBuV)

(2) Adjust L941 until the value of millivoltmeter reaches the maximum.

(3) Adjust the S.S.G setting to 290 kHz, 75 kHz variation, and reduce the output level all the way. (approximately 90 dBuV)

(4) Adjust TC942 until the value of the millivoltmeter reaches the maximum.

(5) Repeat the adjustment 2 or 3 times from step 1 to 4 above.

8. Auto Stop Check (MW)

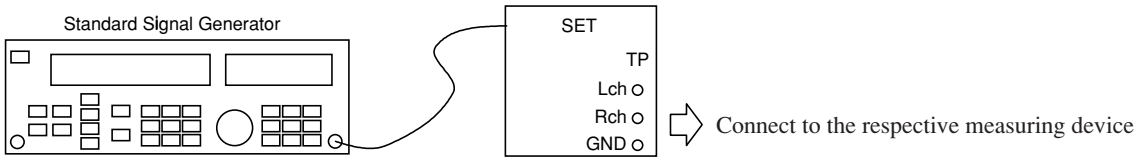
Requirement

(1) Adjust the S.S.G setting to 999 kHz, 30% variation, and 78 dBuV for the output level.

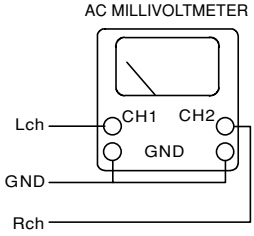
(2) Activate the tuner search function, and check that there is reception of 999 kHz.

<FM Adjustment>

For adjusting FM, do wiring and connection as in the following.



9. Separation Check



Requirement

Measuring device: Millivoltmeter

Test Point: Lch, Rch, GND

(1) Adjust the S.S.G setting to 98.0 MHz, 67.5 kHz variation, and 72 dBuV.

(2) Switch to PILOT ON and set to PILOT 7.5 kHz of the S.S.G.

(3) Set output to Lch only, and check that the millivoltmeter value for Rch is below 12 dB by comparing with Lch.

(4) Set output to Rch only, and check that the Lch value is below 12 dB corresponding to Rch.

10. Auto Stop Check (FM)

Requirement

(1) Adjust the S.S.G setting to 98.0 MHz, 75 kHz variation, and 40 dBuV for the output level.

(2) Activate the tuner search function, and check that there is reception of 98.0 MHz.

CD TEST MODE

1. How to Activate CD Test Mode

While pressing the DISC PLAY/BAND button, insert the AC plug.
When the test mode starts, all lights on the display are lit.

2. How to Cancel CD Test Mode

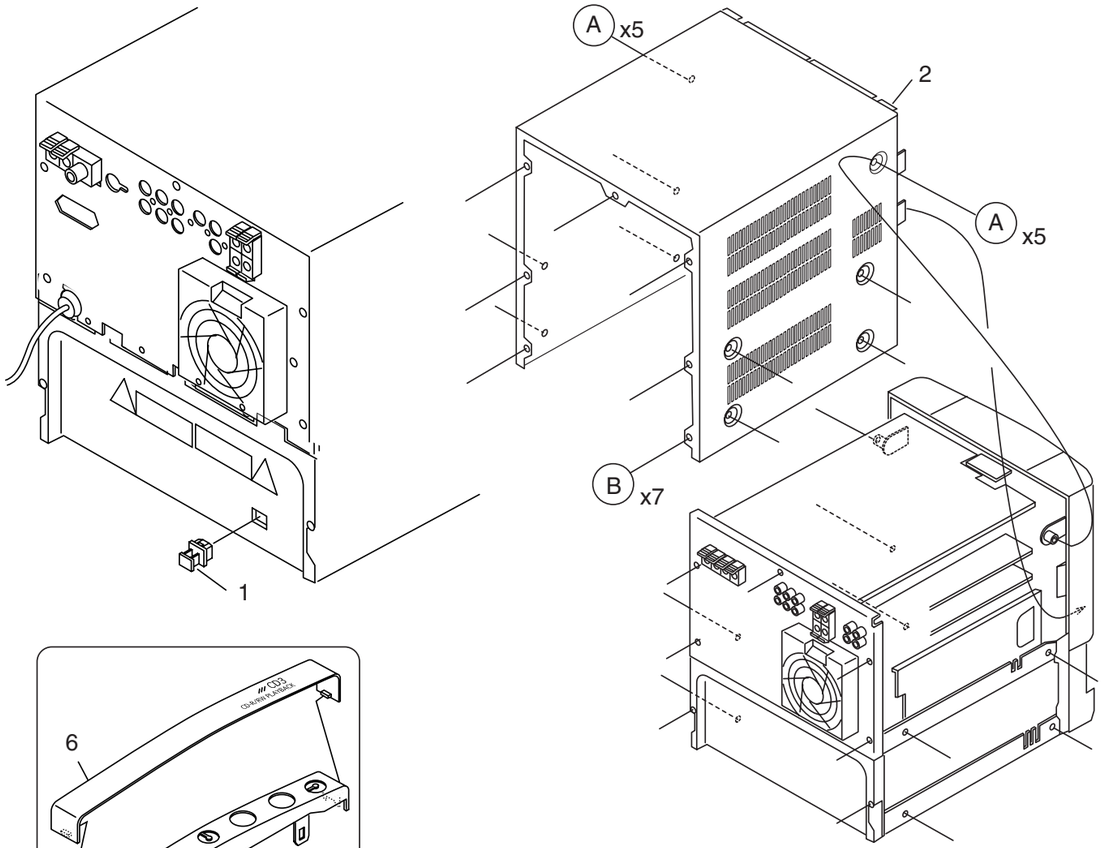
Press the POWER button or remove the AC plug.
* The test mode is cancelled by other function keys during play.

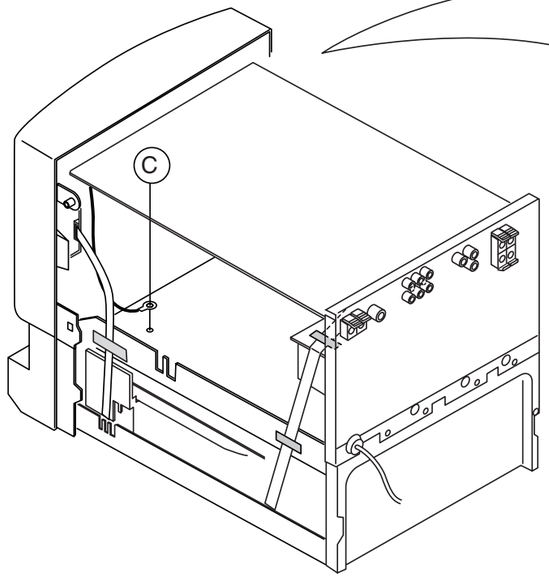
3. Function and Usage of CD Test Mode

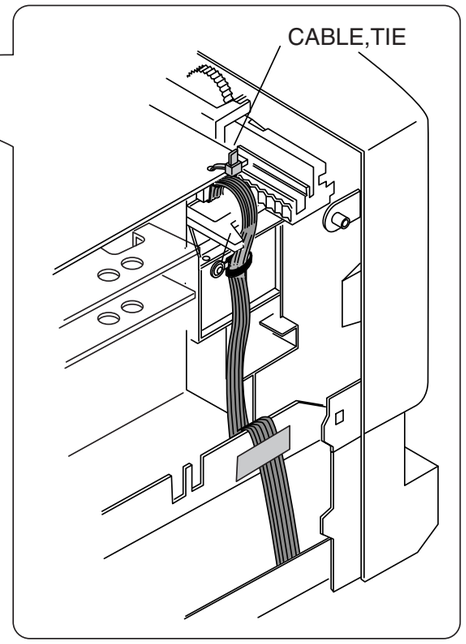
No	Mode	Button for Activation	Display	Operation	Contents
1	Start Mode		All lights are lit.	FL is all lit.	• FL check • Microcomputer check
2	Search Mode	STOP button	READING	• Laser diode is lit during the mode. • Focus search continuous operation. *1 • Spindle motor continuous kick.	• APC circuit check • Laser current measurement • Focus search waveform check
3	Play Mode	PLAY button	Normal	• Normal playback. • Focus search continues if TOC READ cannot be read.	• All servo circuits check • DRF check
4	Traverse Mode	PAUSE button	Normal	• Tracking Servo OFF/ON. Repeat OFF/ON each pressing PAUSE button.	• Tracking balance check
5	Sled Mode	FF button	TEST	• PU moves to inner track. *2 At the same time, the lens is kicked to inner track.	• Sled circuit check • Tracking circuit check • Mechanism operation check • PU check
		RWD button	TEST	• PU is moves to outer track. *2 At the same time, the lens is kicked to outer track.	

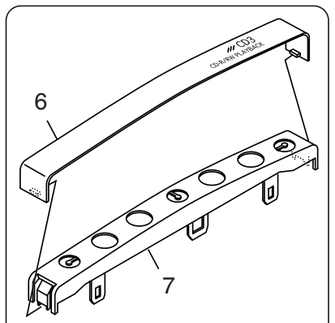
* 1 … When focus search operates continuously for more than 10 minutes, the protection circuit may start due to the generation of heat in the driver IC. If this happens, turn off the power, leave the unit for a while and then, restart.

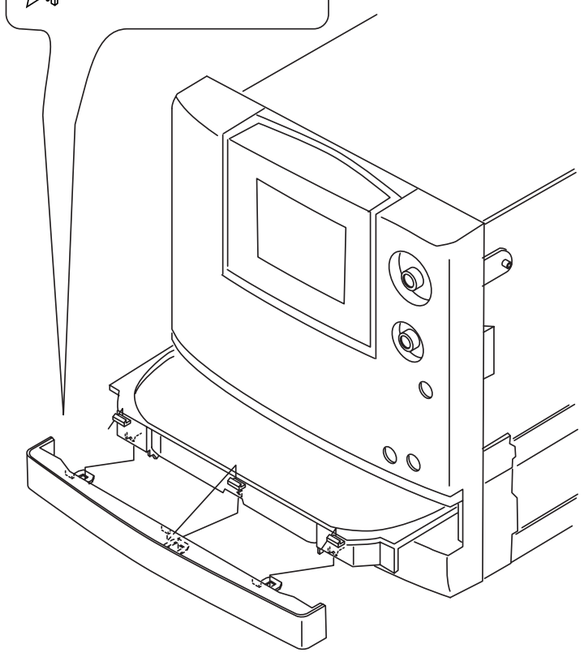
* 2 … Be careful not to damage the gear because the sled motor rotates while the FF or RWD button is being pressed even if the pickup is located in the innermost track or the outermost track.

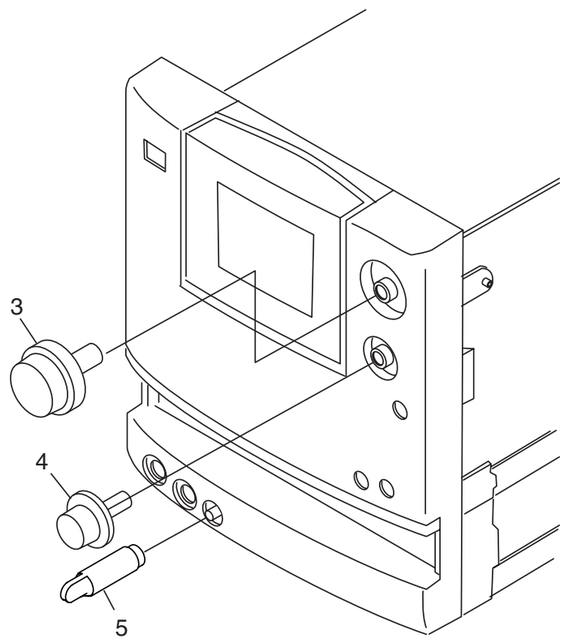

A x5
2
A x5
B x7
1

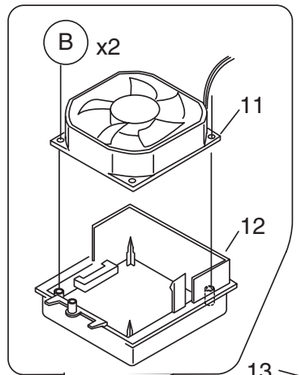

C

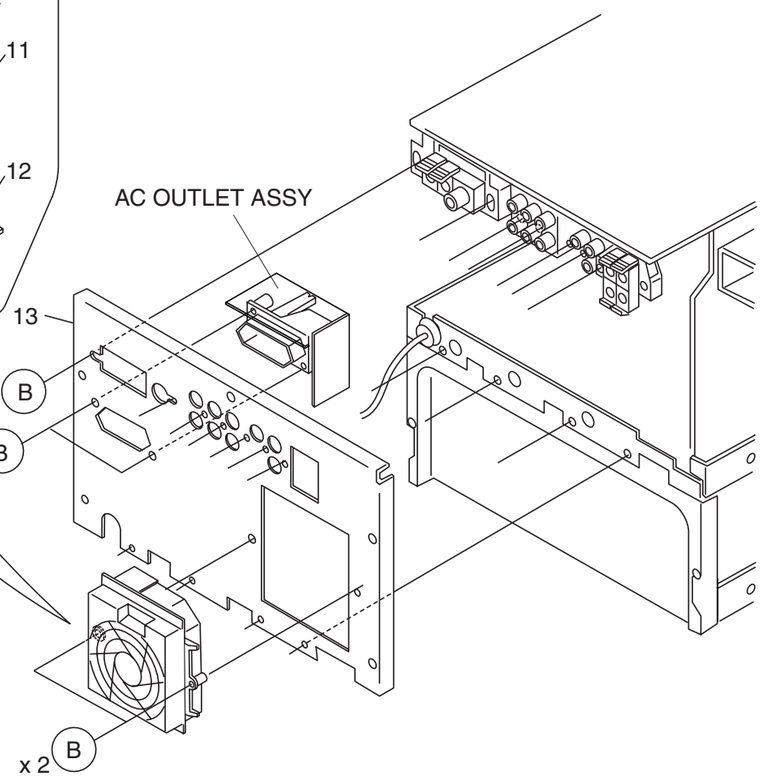

CABLE,TIE

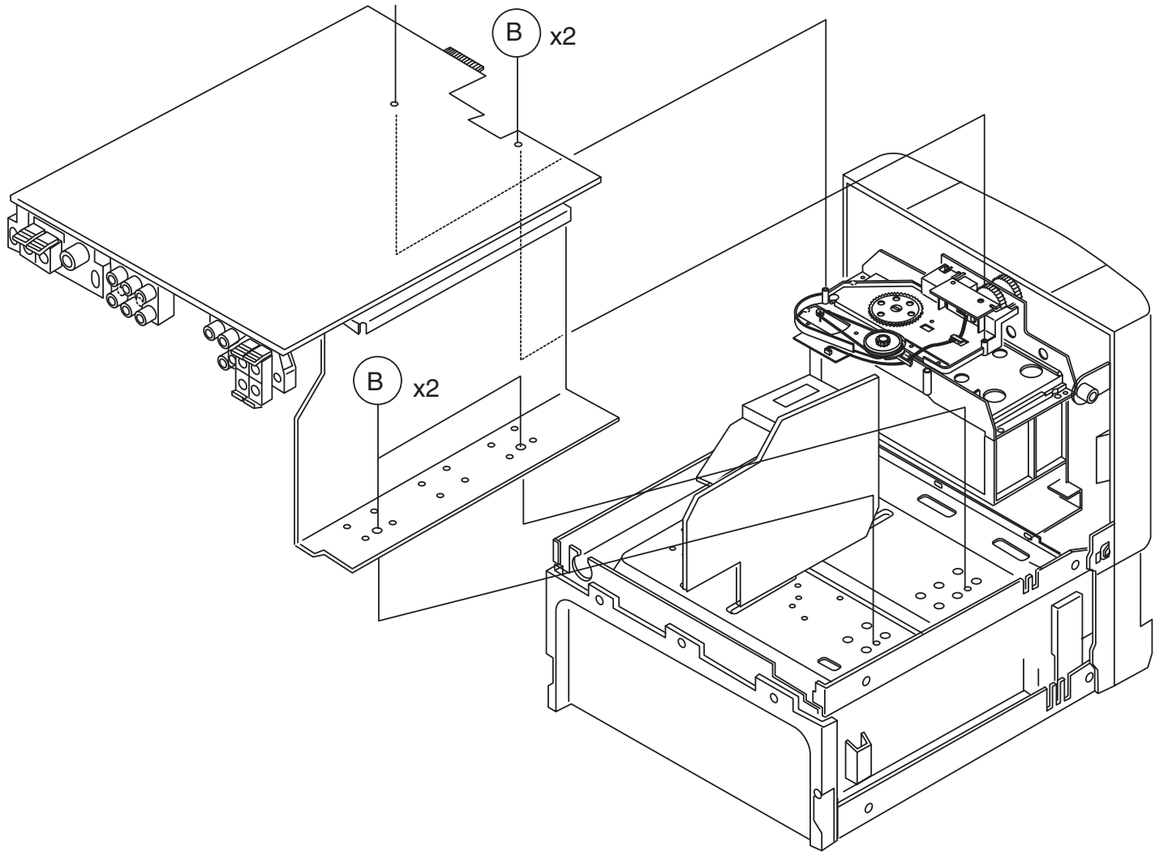

6
7

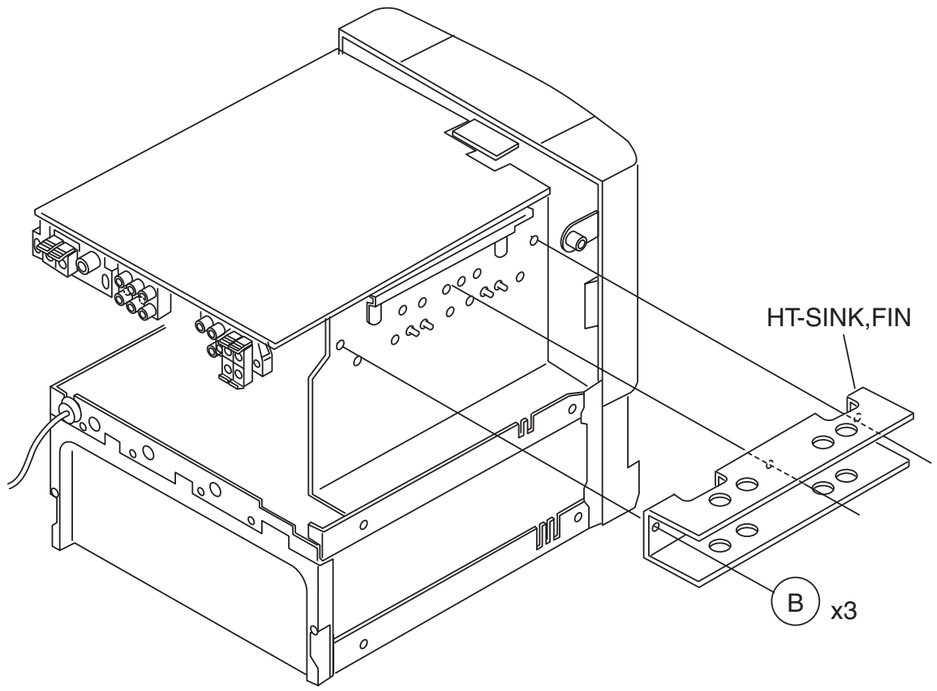


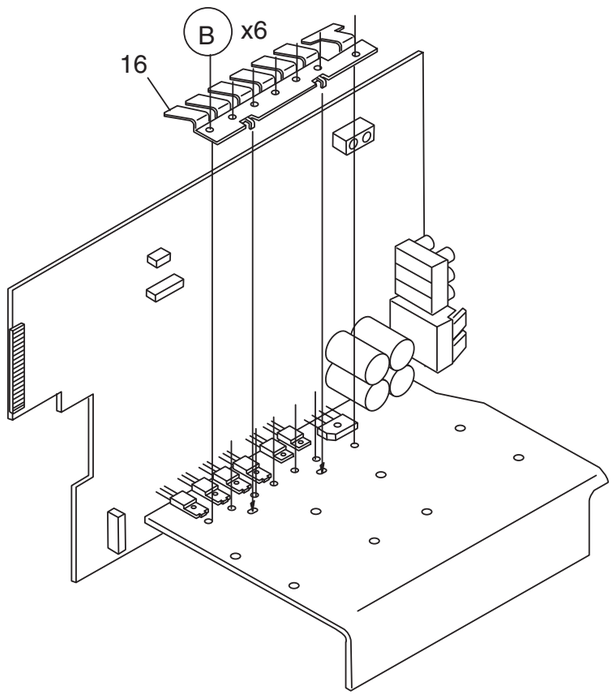

3
4
5

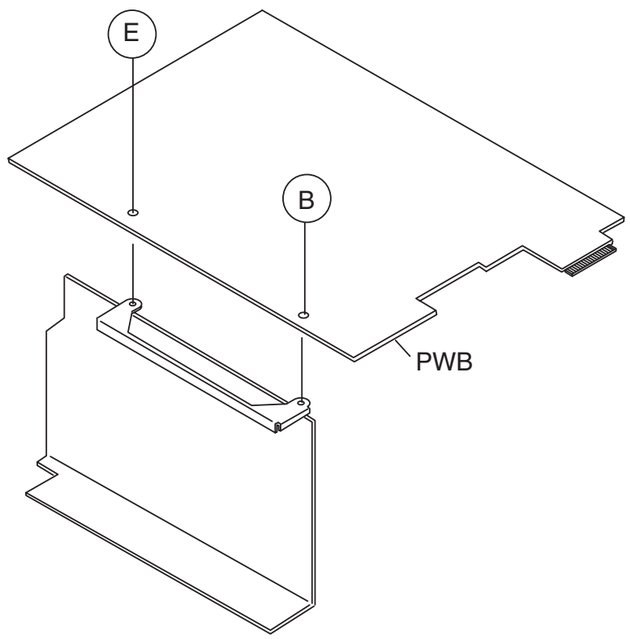

B x2
11
12

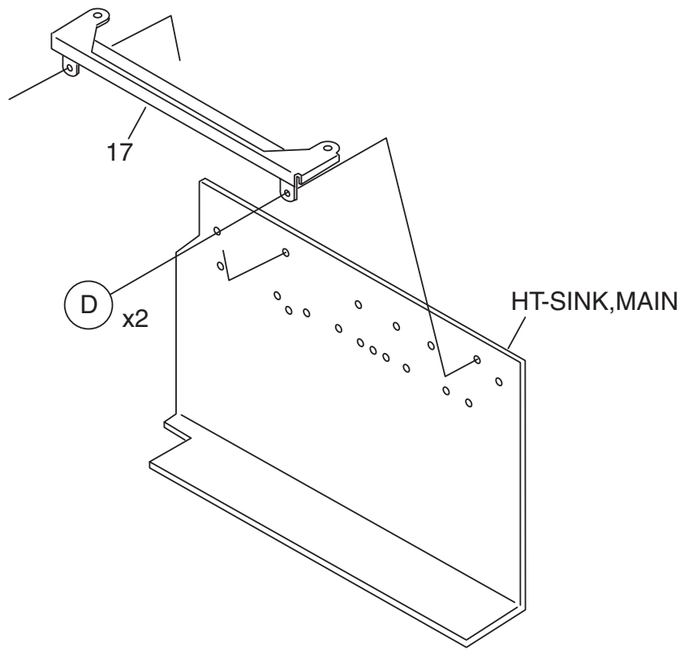

AC OUTLET ASSY
13
x11 B
x 2 B
x 2 B

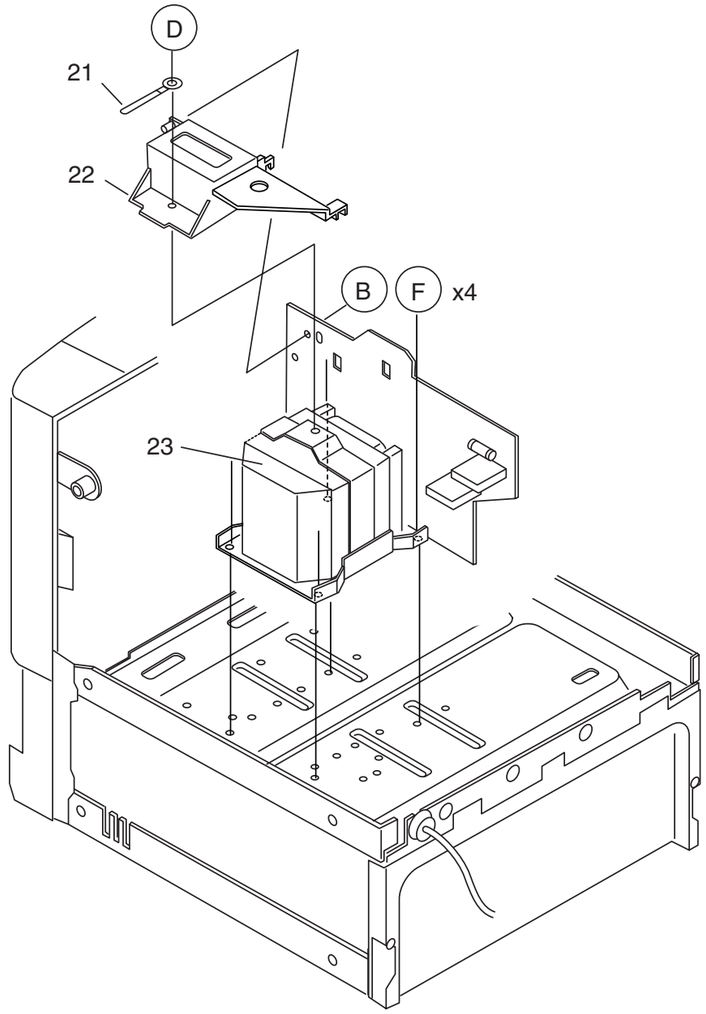

B x2
B x2

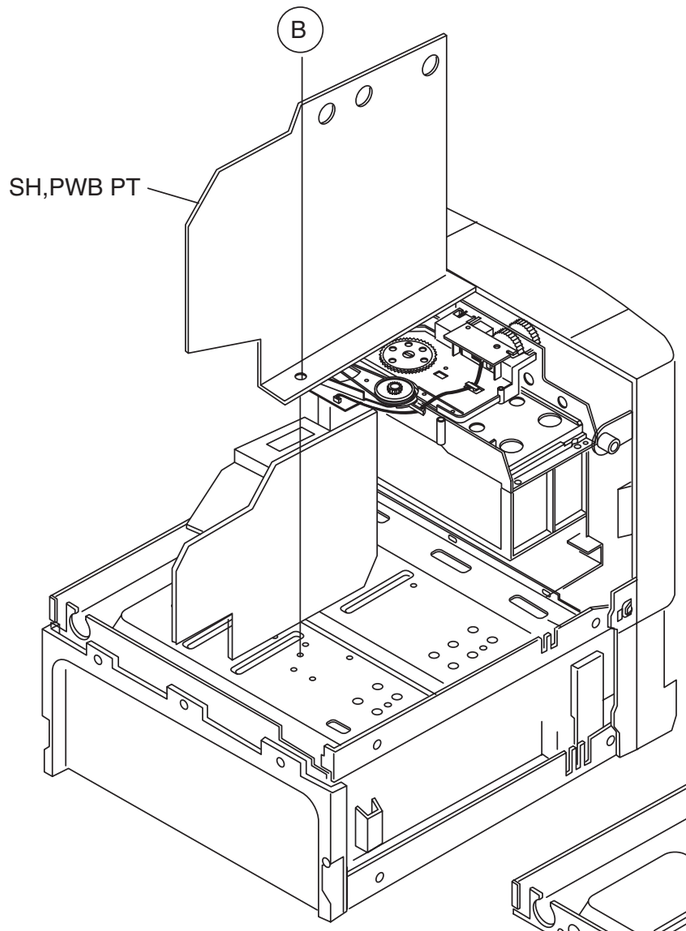

HT-SINK,FIN
B x3

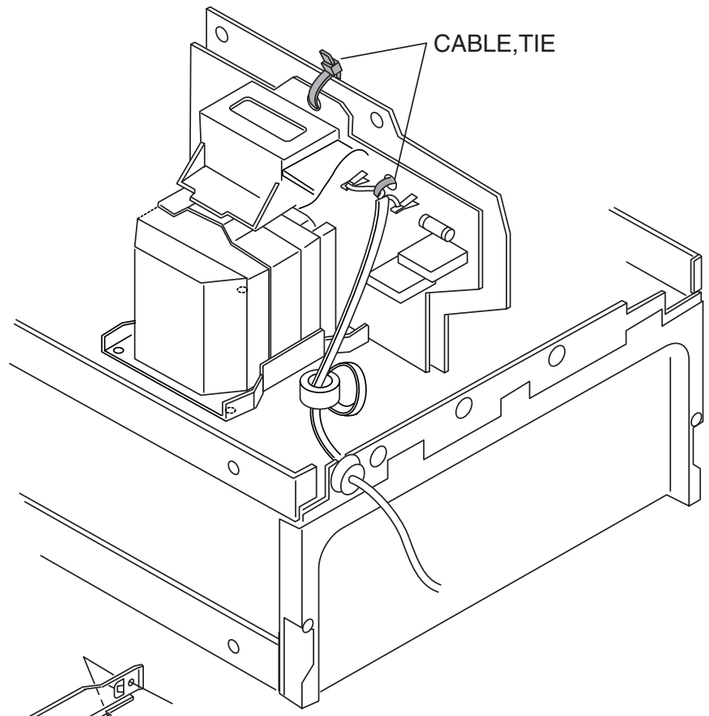

B x6
16

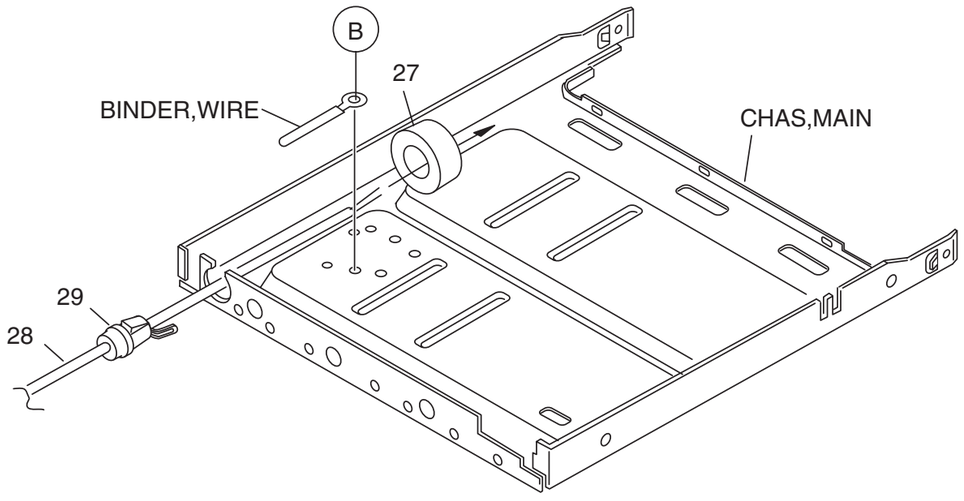

E
B
PWB

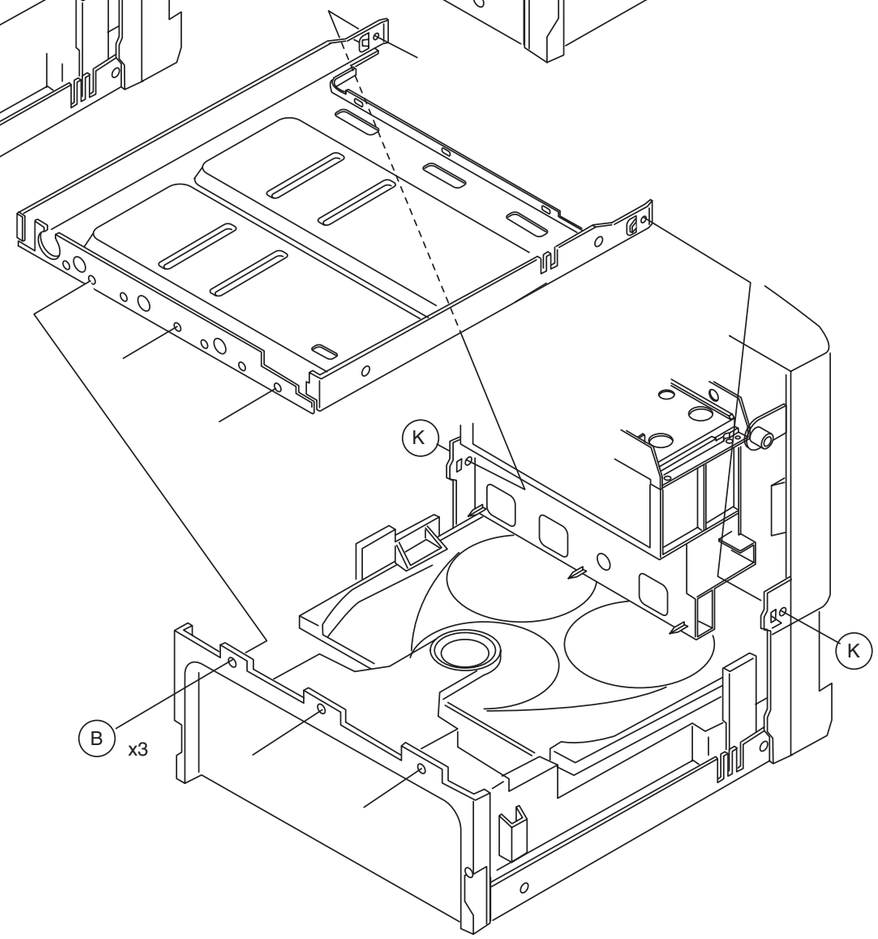

17
D x2
HT-SINK,MAIN

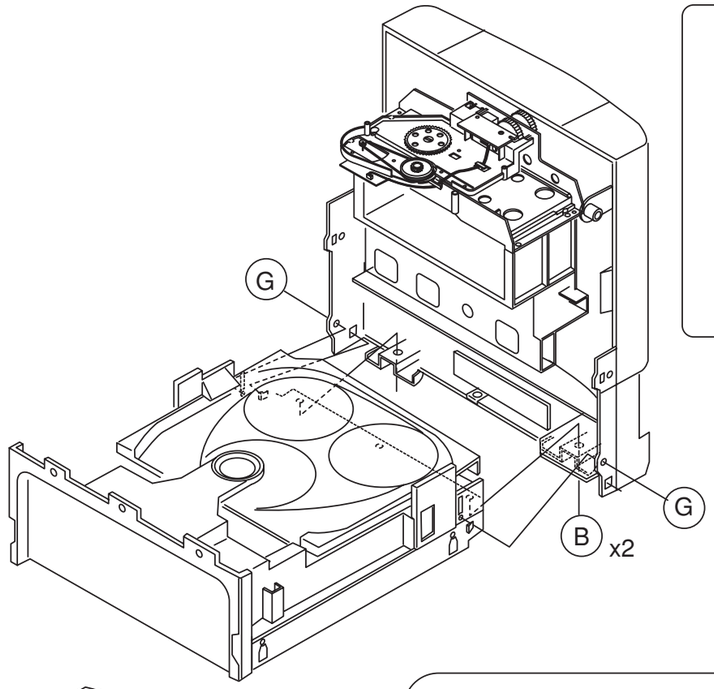

D
21
22
B
F
x4
23

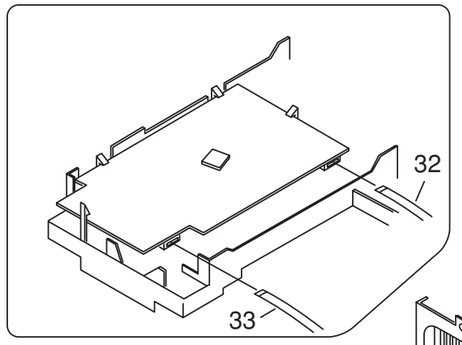

B
SH,PWB PT


CABLE,TIE


B
27
BINDER,WIRE
CHAS,MAIN
29
28


K
K
B
x3


G
G
B x2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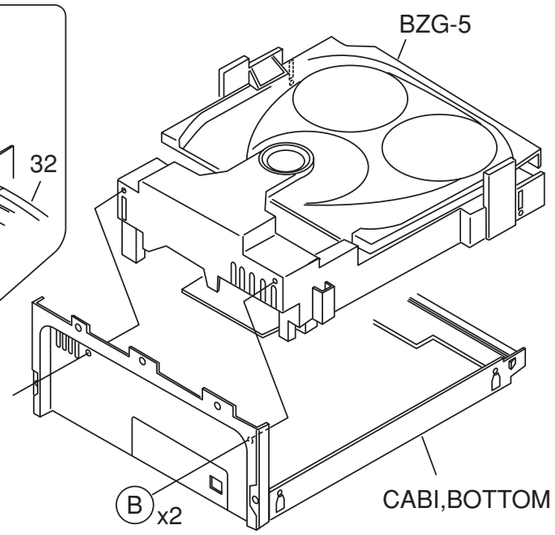
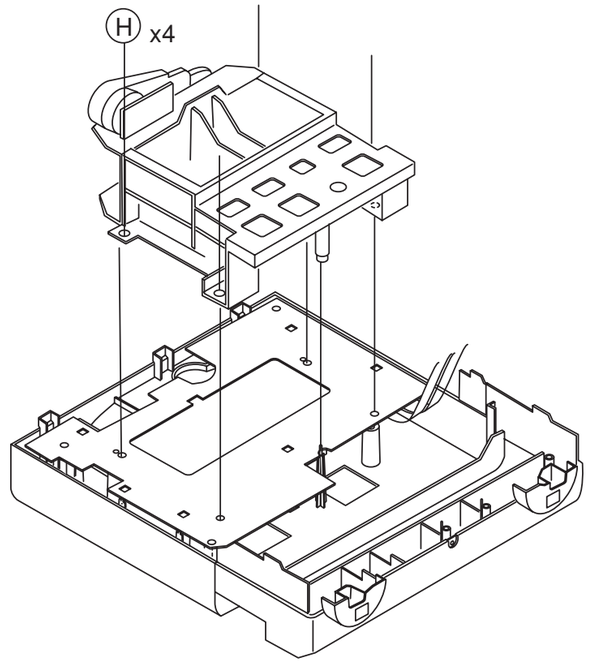
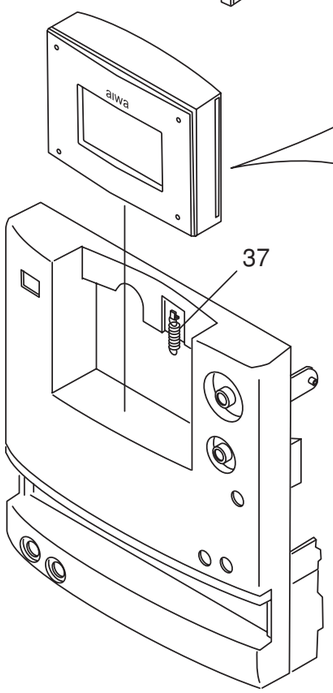

BZG-5
B x2
CABI,BOTTOM


H x4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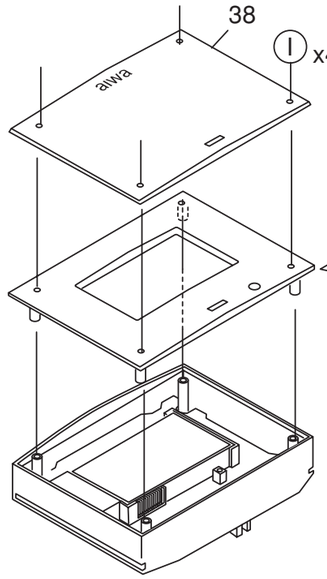
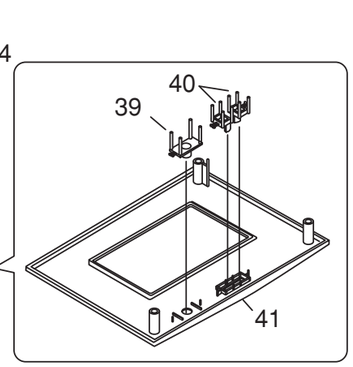

38
I x4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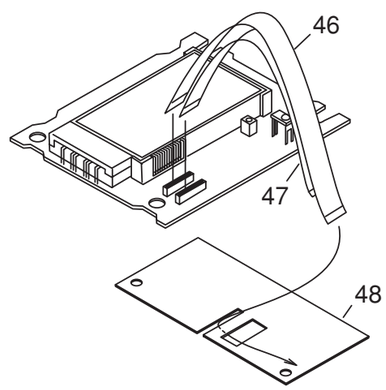
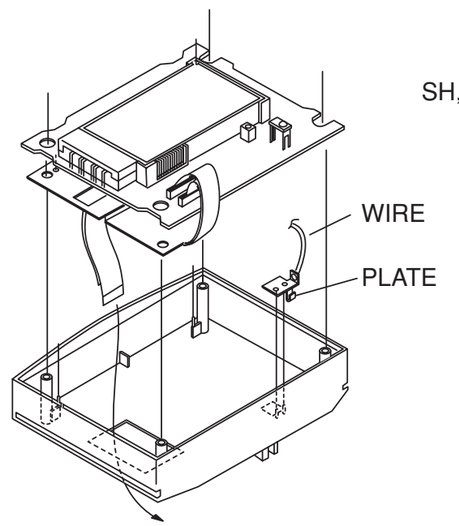
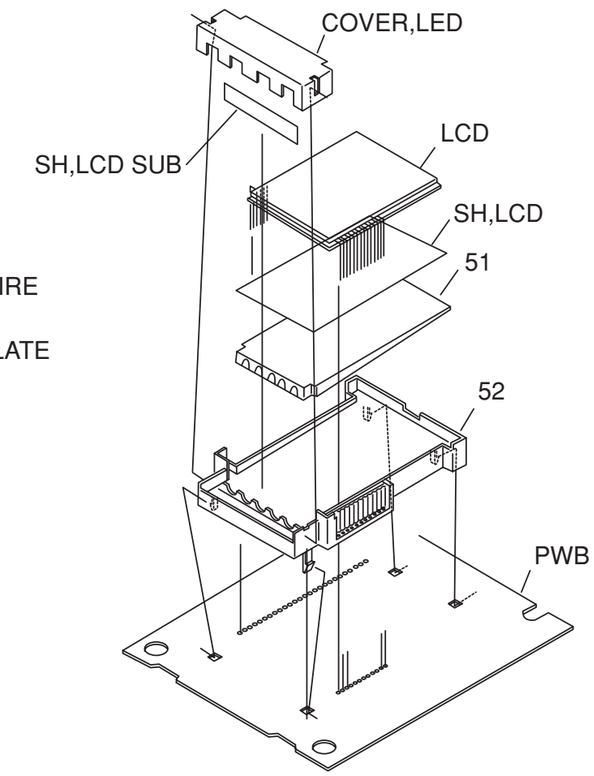
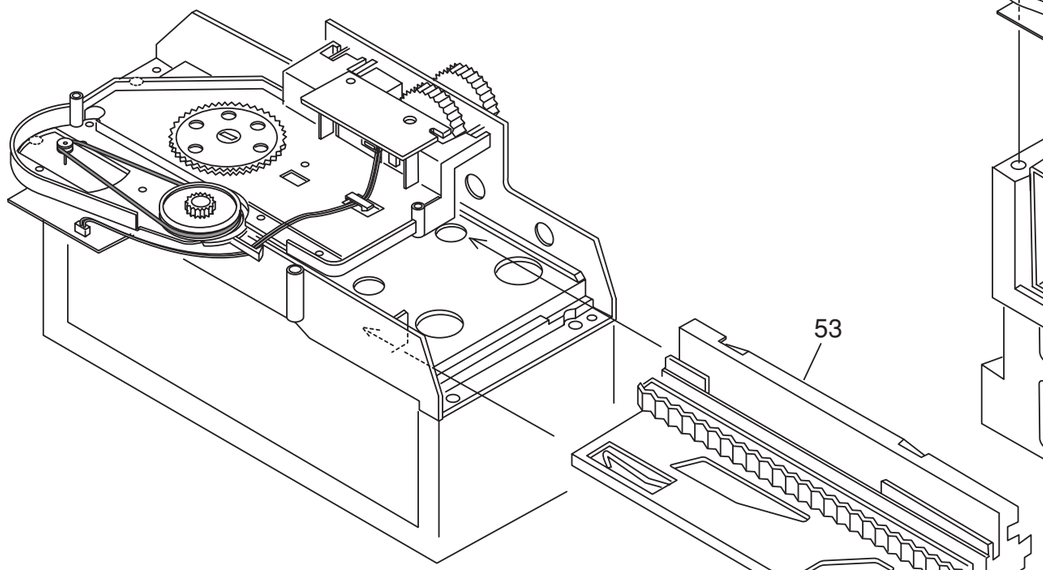
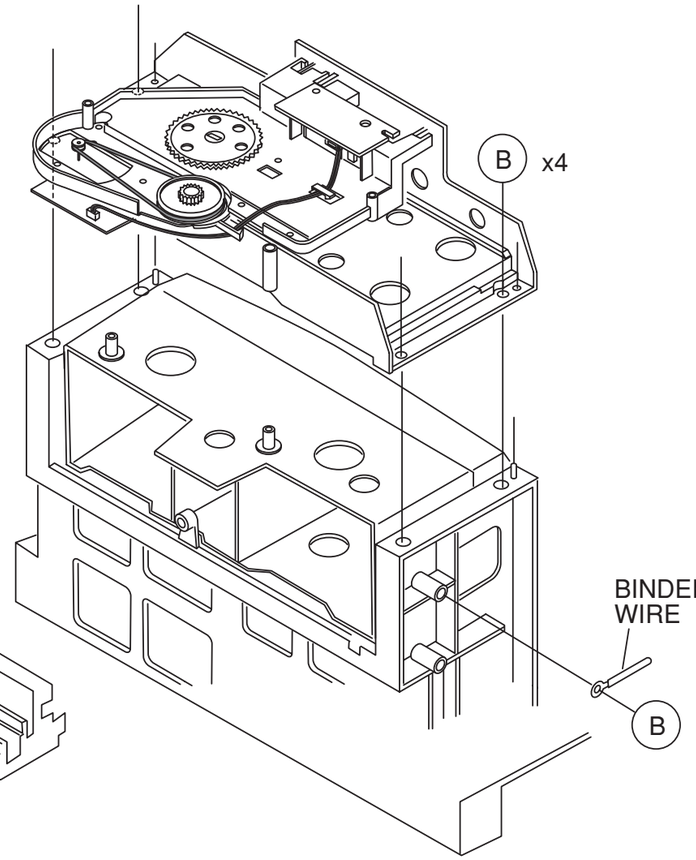
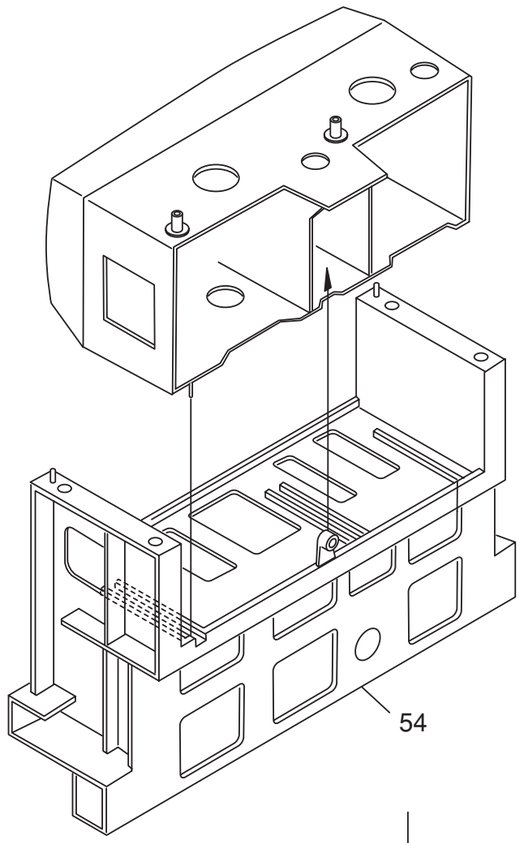

46
47
48


WIRE
PLATE


COVER,LED
LCD
SH,LCD SUB
SH,LCD
51
52
PWB




B x4
BINDER, WIRE
B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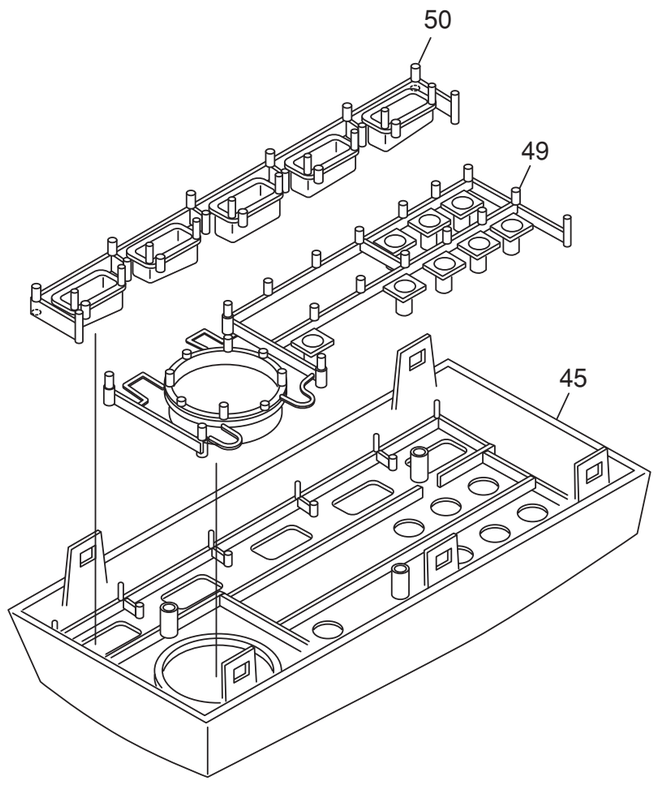
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49
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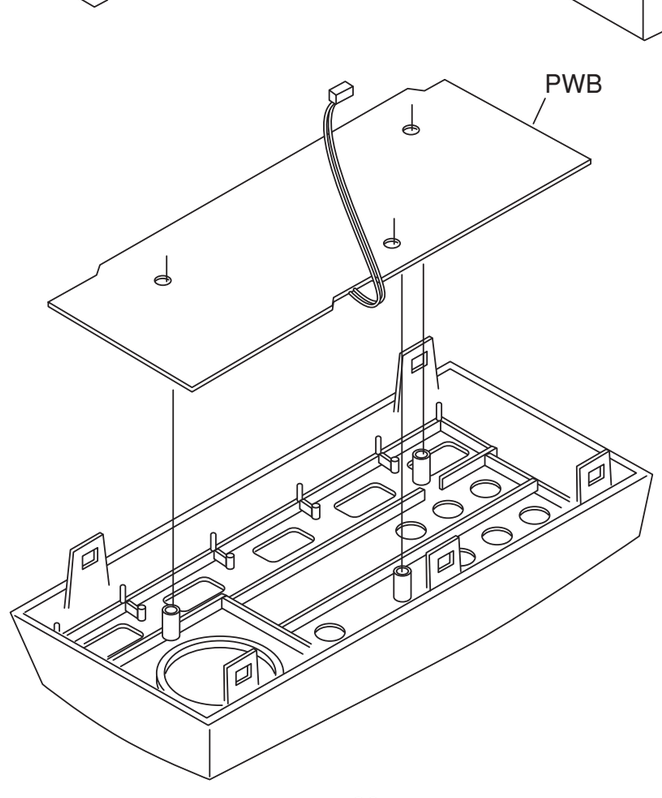
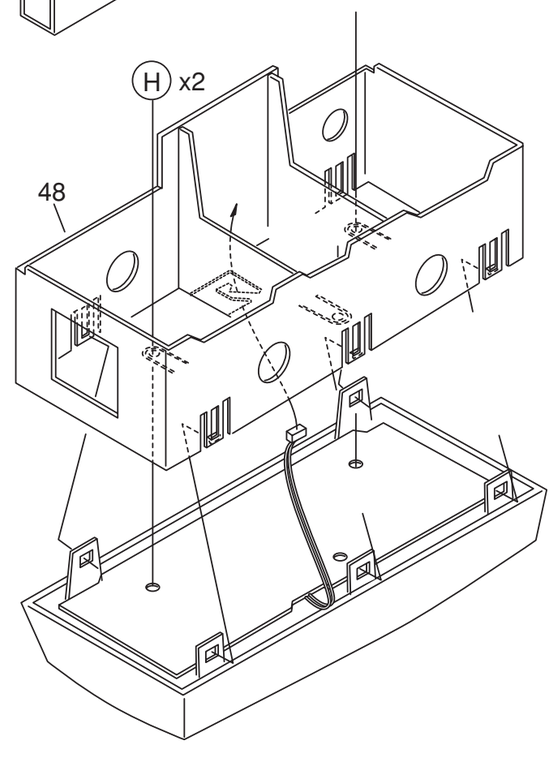
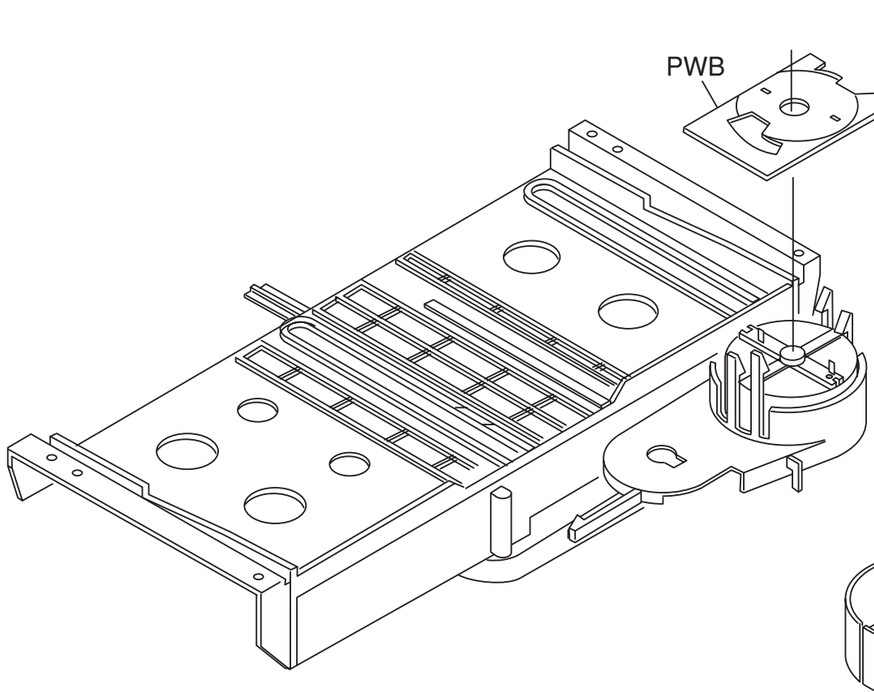
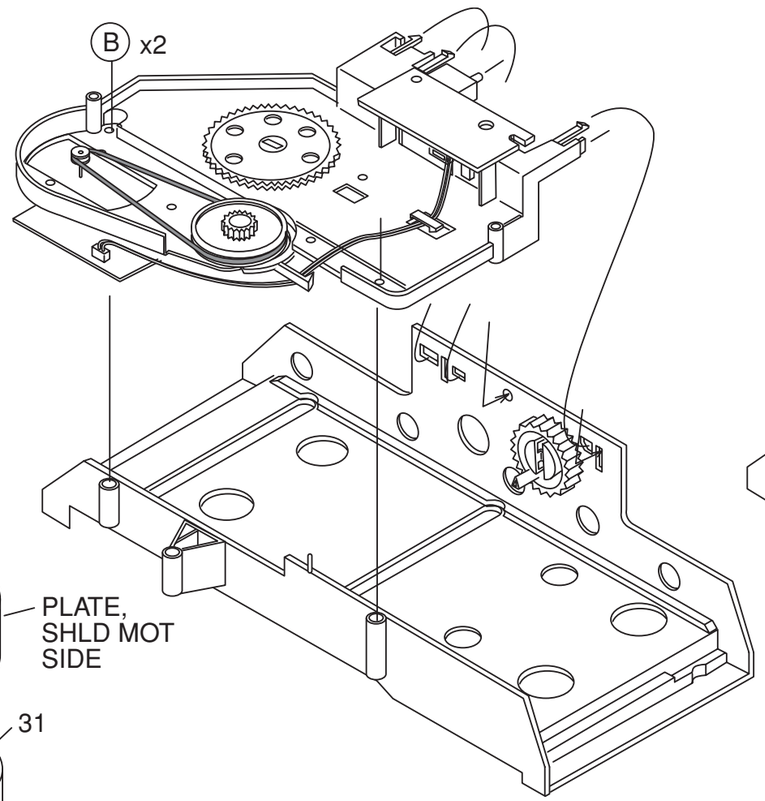
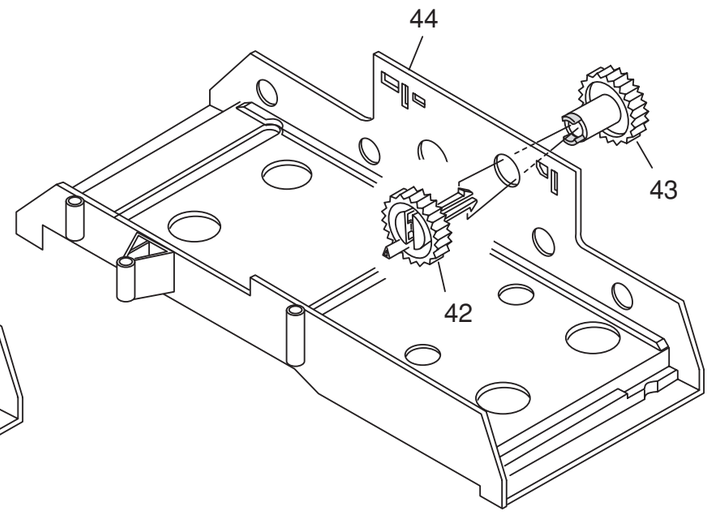

PWB


H x2
48


PWB


B x2
PLATE, SHLD MOT SIDE
31
30
PLATE, SHLD MO TOP
25
26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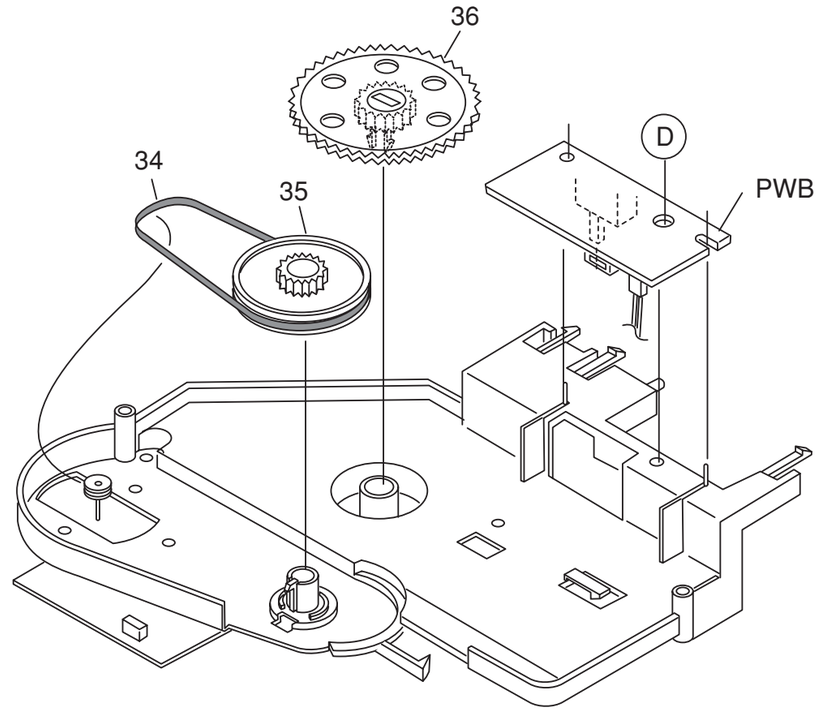
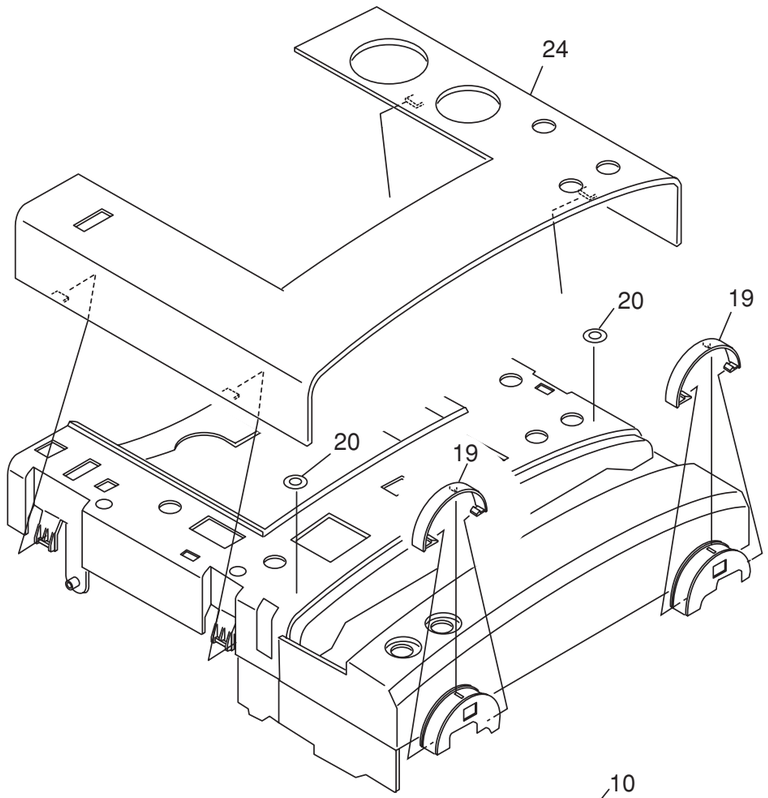
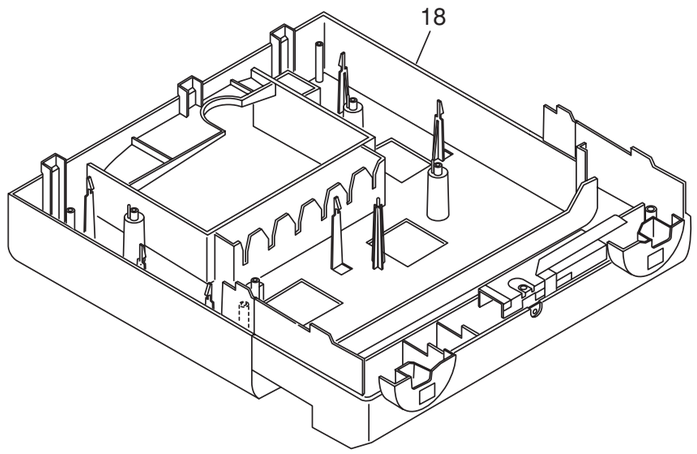
43
42


36
34
35
D
PWB


24
20
19
20
19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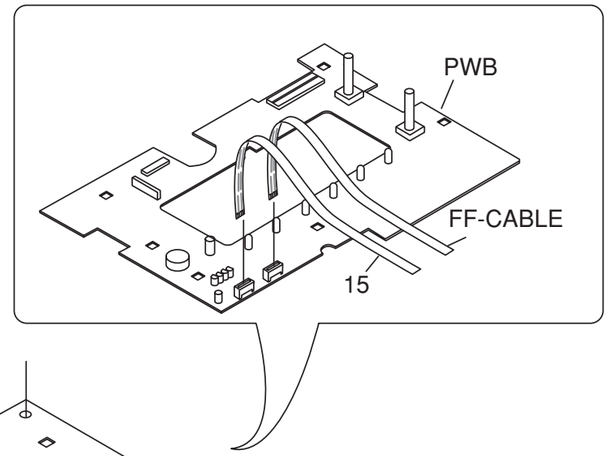
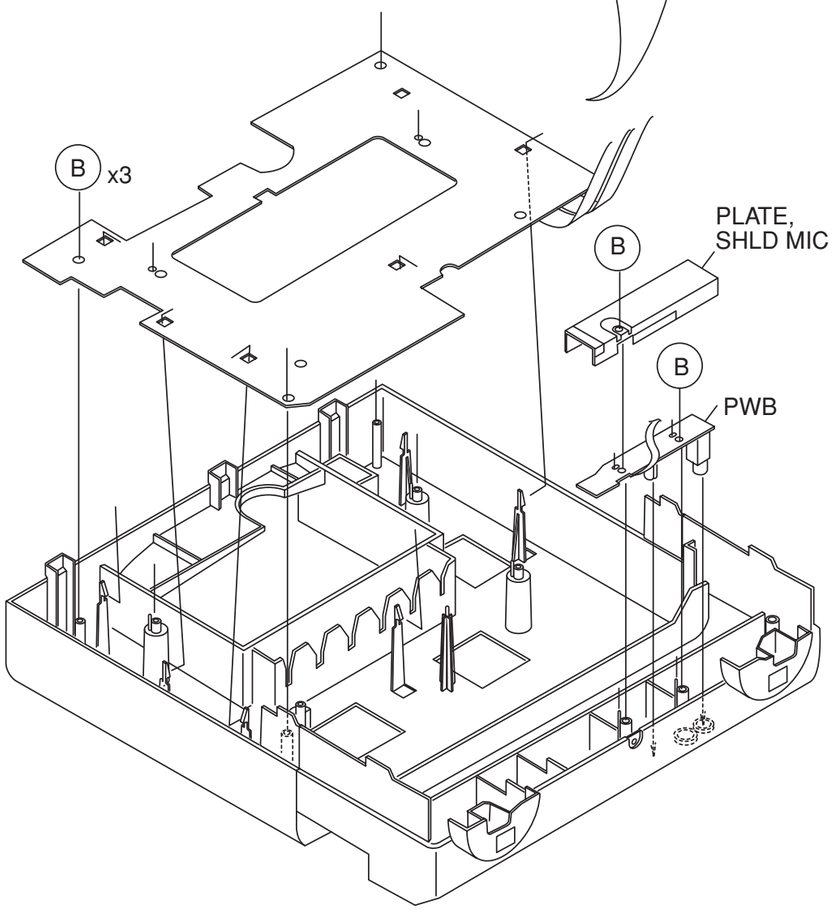
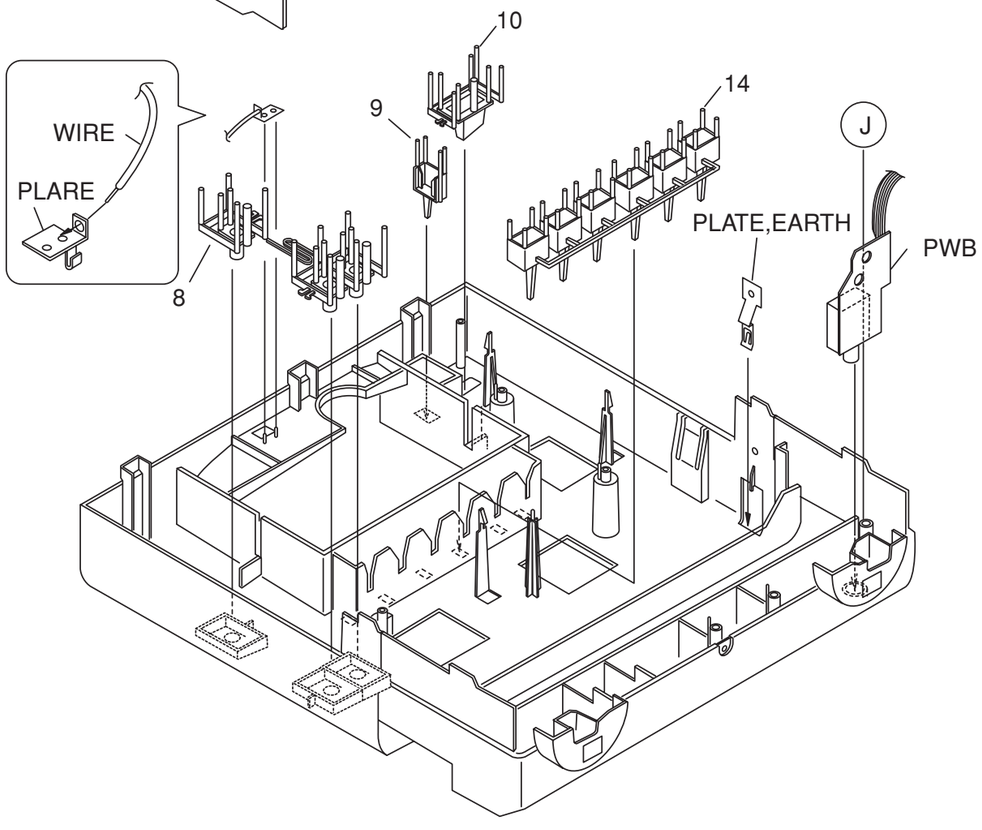

PWB
FF-CABLE
15


B x3
PLATE,
SHLD MIC
B
B
PWB


10
WIRE
PLARE
9
14
J
PLATE,EARTH
PWB
8

MECHANICAL PARTS LIST 1 / 1

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
1	84-ZG1-245-210		CAP,OPTICAL
2	8B-DJW-003-010		CABI,STEEL
3	8B-DJW-018-010		KNOB,RTRY VOL
4	8B-DJW-019-010		KNOB,RTRY FUN
5	8B-NFW-009-010		KNOB,RTRY MIC
6	8B-NFW-003-010		PANEL,TRAY AL
7	8B-DJW-004-010		PANEL,TRAY
8	8B-DJW-012-010		KEY,OPEN/CLOSE
9	8B-DJW-015-010		REFLECTOR,STANDBY
10	8B-DJW-011-010		KEY,POWER
11	87-A91-751-010		FAN,DSB0812M-S382 -400MM
12	8B-NF8-227-010		HLDR,FAN
13	8B-NFW-017-010		PANEL,REAR EZSM FAN<G7EZ[S]>
13	8B-NFW-018-010		PANEL,REAR EZSM G9 FAN<G9EZ[S]>
14	8B-DJW-016-010		REFLECTOR,FUN
15	88-904-361-110		FF-CABLE,4P 1.25 360MM
16	8B-NCK-206-010		HLDR,TR 1
17	8B-NFW-202-010		HLDR,HT-SINK
18	8B-NFW-001-010		CABI,FR
19	8B-DJW-017-010		RING,FOOT
20	87-067-058-010		W-F,3.2-8-0.5 W/ADH
21	87-064-185-010		HLDR,WIRE PVC 0.5
22	8A-NF7-225-010		HLDR,PWB PT 85S
⚠ 23	8B-NFW-602-010		PT,BNF-29 EZ
24	8B-NFW-007-010		PANEL,AMP AL G7<G7EZ[S]>
24	8B-NFW-002-010		PANEL,AMP AL G9<G9EZ[S]>
25	8B-DJW-255-010		GEAR,RACK
26	8B-DJW-253-010		HLDR,GEAR
27	87-A90-457-010		F-BEAD,15-25-15 E2515JRT
⚠ 28	87-A80-157-010		AC CORD ASSY,E BLK CC
29	87-085-185-010		BUSHING,AC CORD(E) CM-22B
30	84-ZG1-267-010		PULLEY,LOAD MO 8
31	87-045-305-010		MOT,RF-500TB
32	88-908-451-110		FF-CABLE,8P 1.25 450MM
33	88-906-401-110		FF-CABLE,6P 1.25
34	84-ZG1-209-010		BELT,SQ1.8-117.7
35	84-ZG1-271-010		PULLEY,RELAY 8
36	8B-NF8-214-010		GEAR,RELAY
37	8B-DJW-258-010		SPR-E,LIFT
38	8B-DJW-006-010		WINDOW,DISPLAY
39	8B-DJW-037-010		LENS,SENSOR
40	8B-DJW-020-010		KEY,TOUCH
41	8B-DJW-007-010		PANEL,WINDOW
42	8B-DJW-257-010		GEAR,JOINT-B
43	8B-DJW-256-010		GEAR,JOINT-A
44	8B-DJW-252-010		HLDR,CAM
45	8B-NFW-008-010		PANEL,OPERATION RDS
46	8B-DJW-632-010		FF-CABLE,19P 1.0 220MM
47	8B-DJW-631-010		FF-CABLE,21P 1.0 180MM
48	8B-DJW-251-010		HLDR,P-SW
49	8B-DJW-024-010		KEY,OPERATION RDS
50	8B-DJW-013-010		KEY,PLAY
51	8B-DJW-022-010		REFLECTOR,LCD
52	8B-DJW-201-010		GUIDE,LCD
53	8B-DJW-254-010		PLATE,MAIN CAM
54	8B-DJW-250-010		HLDR,MECHA MOVE
A	87-067-641-010		UTT2+3-8 W/O SLOT BLK
B	87-067-703-010		BVT2+3-10 W/O SL0T
C	87-067-688-010		BVTT+3-6
D	87-067-660-010		BVT2+3-8 W/O SL0T BLK
E	87-NF4-224-010		S-SCREW,IT3B+3-8 CU
F	87-078-200-010		S-SCREW,ITC+4-8 R
G	87-721-097-410		QT2+3-12 W/O SLOT
H	87-067-581-010		BVT2+3-15 W/O SL0T
I	8B-DJW-204-010		S-SCREW,WINDOW
J	88-AR1-217-010		S-SCREW,BFT2+3-8
K	87-591-095-410		QIT+3-8

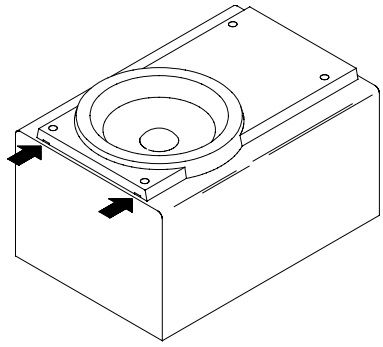
COLOR NAME TABLE

Basic color symbol	Color	Basic color symbol	Color	Basic color symbol	Color
B	Black	C	Cream	D	Orange
G	Green	H	Gray	L	Blue
LT	Transparent Blue	N	Gold	P	Pink
R	Red	S	Silver	ST	Titan Silver
T	Brown	V	Violet	W	White
WT	Transparent White	Y	Yellow	YT	Transparent Yellow
LM	Metallic Blue	LL	Light Blue	GT	Transparent Green
LD	Dark Blue	DT	Transparent Orange	GM	Metallic Green
YM	Metallic Yellow	DM	Metallic Orange	PT	Transparent Pink
LA	Aqua Blue	GL	Light Green	HT	Transparent Gray

GENERAL SPEAKER DISASSEMBLY INSTRUCTIONS (FOR REFERENCE)

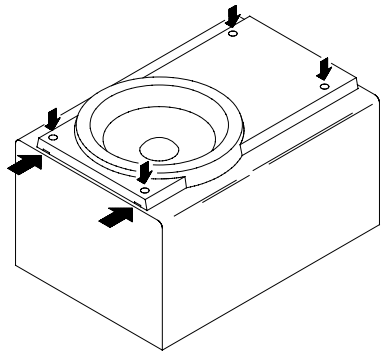
Type.1

Insert a flat-bladed screwdriver into the position indicated by the arrows and remove the panel. Remove the screws of each speaker unit and then remove the speaker units.



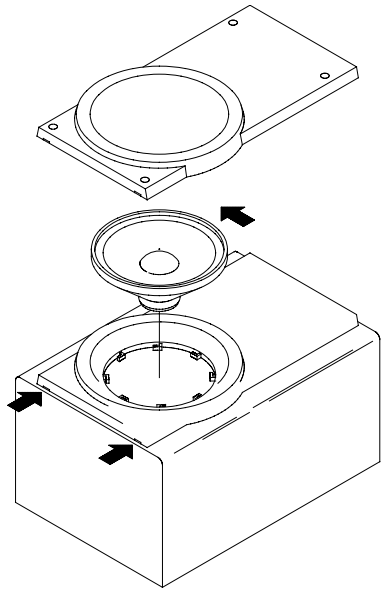
Type.2

Remove the grill frame and four pieces of rubber caps by pulling out with a flat-bladed screwdriver. Remove the screws from hole where installed rubber caps. Insert a flat-bladed screwdriver into the position indicated by the arrows and remove the panel. Remove the screws of each speaker unit and then remove the speaker units.

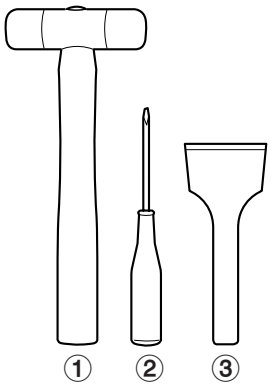


Type.3

Insert a flat-bladed screwdriver into the position indicated by the arrows and remove the panel. Turn the speaker unit to counter-clockwise direction while inserting a flat-bladed screwdriver into one of the hollows around speaker unit, and then remove the speaker unit. After replacing the speaker unit, install it turning to clockwise direction until "click" sound comes out.



Type.4



TOOLS

① Plastic head hammer
② (⊖) flat head screwdriver
③ Cut chisel

How to Remove the PANEL, FR

1. Insert the (⊖) flat head screwdriver tip into the gap between the PANEL, FR and the PANEL, SPKR. Tap the head of the (⊖) flat head screwdriver with the plastic hammer head, and create the clearance as shown in Fig-1.

2. Insert the cut chisel in the clearance, and tap the head of the cut chisel with plastic hammer as shown in Fig-2, to remove the PANEL, FR.

3. Place the speaker horizontally. Tap head of the cut chisel with plastic hammer as shown in Fig-3, and remove the PANEL, FR completely.

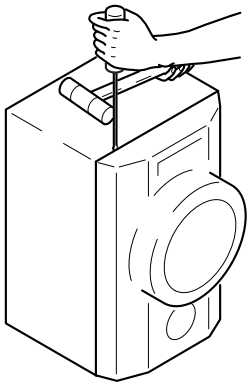


Fig-1

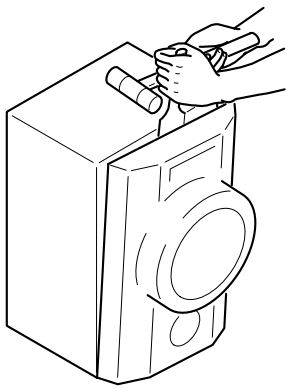


Fig-2

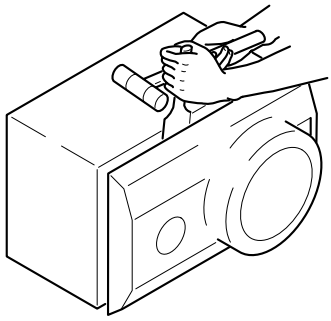


Fig-3

How to Attach the PANEL, FR

Attach the PANEL, FR to the PANEL, SPKR. Tap the four corners of the PANEL, FR with the plastic hammer to fit the PANEL, FR into the PANEL, SPKR completely.

SPEAKER PARTS LIST <SX–G7 (YTL)>

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
1	8B-NS1-005-010		GRILLE,FRAME ASSY
2	8B-NS1-602-010		SPKR,W 140
3	8B-NS1-604-010		SPKR,TW 25
4	8B-NS1-616-010		CORD,SP
5	8A-NST-614-010		TERMINAL
6	8B-NS1-004-010		RING,W

SPEAKER PARTS LIST <SX–G9 (YTL)>

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
1	8B-NSM-007-010		GRILLE,FRAME ASSY
2	8B-NSM-602-010		SPKR,W 140
3	8B-NSM-604-010		SPKR,TW 25
4	8B-NS1-616-010		CORD,SP
5	8B-NSM-009-010		TERMINAL
6	8B-NSM-002-010		RING,W
7	8B-NSM-004-010		RING,TW

ACCESSORIES / PACKAGE LIST

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
1	8B-NFW-906-010		IB,EZ (9L) M
2	87-A90-118-010		ANT,WIRE FM(Z)
3	87-006-268-010		ANT,LOOP AM
4	8B-NFW-701-010		RC UNIT,RC-BAS15
⚠ 5	87-099-811-010		PLUG,ADPTR CONV (K)

アイワ株式会社 〒110-8710 東京都台東区池之端1-2-11 ☎03(3827)3111 (代表)
AIWA CO.,LTD. 2-11, IKENOHATA 1-CHOME, TAITO-KU, TOKYO 110, JAPAN TEL:03 (3827) 3111

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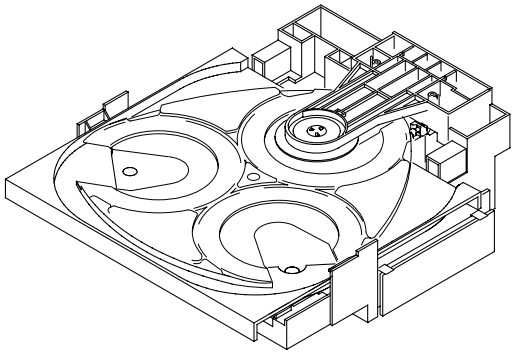
aiwa SERVICE

BZG-5

English



SERVICE MANUAL

CD MECHANISM

BASIC CD MECHANISM : 3ZG-2E3NM
3ZG-2E7NF

TYPE	BASIC CD MECHANISM
YZD3NCM	3ZG-2E3NM
YZD3N1CM	3ZG-2E3NM
ZD7NFD	3ZG-2E7NF
ZD3GNDM	3ZG-2E3NM

aiwa

S/M Code No. 09-00C-353-3N4

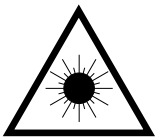
DATA

PROTECTION OF EYES FROM LASER BEAM DURING SERVICING

This set employs laser. Therefore, be sure to follow carefully the instructions below when servicing.

WARNING!

WHEN SERVICING, DO NOT APPROACH THE LASER EXIT WITH THE EYE TOO CLOSELY. IN CASE IT IS NECESSARY TO CONFIRM LASER BEAM EMISSION. BE SURE TO OBSERVE FROM A DISTANCE OF MORE THAN 30cm FROM THE SURFACE OF THE OBJECTIVE LENS ON THE OPTICAL PICK-UP BLOCK.



- Caution: Invisible laser radiation when open and interlocks defeated avoid exposure to beam.
- Advarsel: Usynling laserstråling ved åbning, når sikkerhedsafbrydere er ude af funktion. Undgå udsættelse for stråling.

VAROITUS!

Laiteen Käyttäminen muulla kuin tässä käyttöohjeessa mainitulla tavalla saattaa altistaa käyt-täjän turvallisuusluokan 1 ylittävälle näkymättömälle lasersäteilylle.

VARNING!

Om apparaten används på annat sätt än vad som specificeras i denna bruksanvising, kan användaren utsättas för osynling laserstrålning, som överskrider gränsen för laserklass 1.

CAUTION

Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

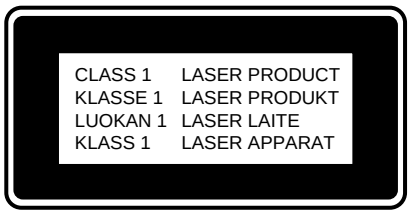
ATTENTION

L'utilisation de commandes, réglages ou procédures autres que ceux spécifiés peut entraîner une dangereuse exposition aux radiations.

ADVARSEL!

Usynlig laserstråling ved åbning, når sikkerhedsafbrydereer ude af funktion. Undgå udsættelse for stråling.

This Compact Disc player is classified as a CLASS 1 LASER product.
The CLASS 1 LASER PRODUCT label is located on the rear exterior.

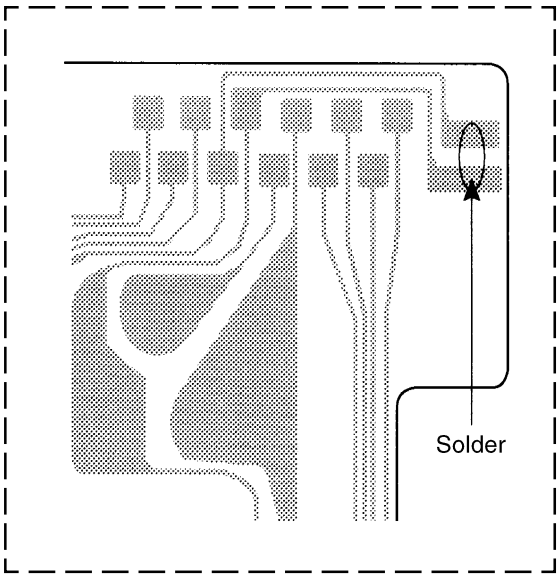


Precaution to replace Optical block (KSS-213F, 5ZL-3)

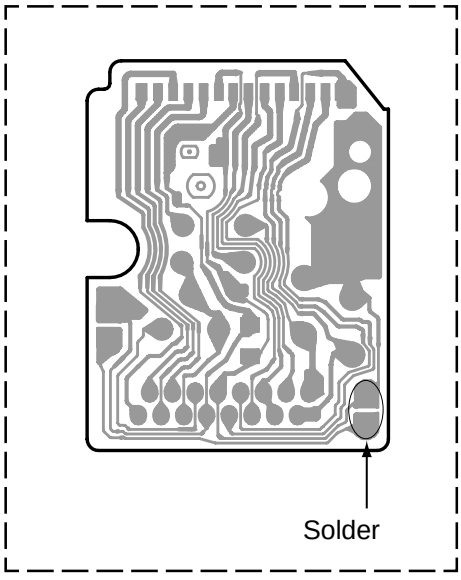
Body or clothes electrostatic potential could ruin laser diode in the optical block. Be sure ground body and workbench, and use care the clothes do not touch the diode.

1) After the connection, remove solder shown in the right figure.

PICK-UP ASSY PWB
(KSS-213F: 87-A90-836-010) MODEL



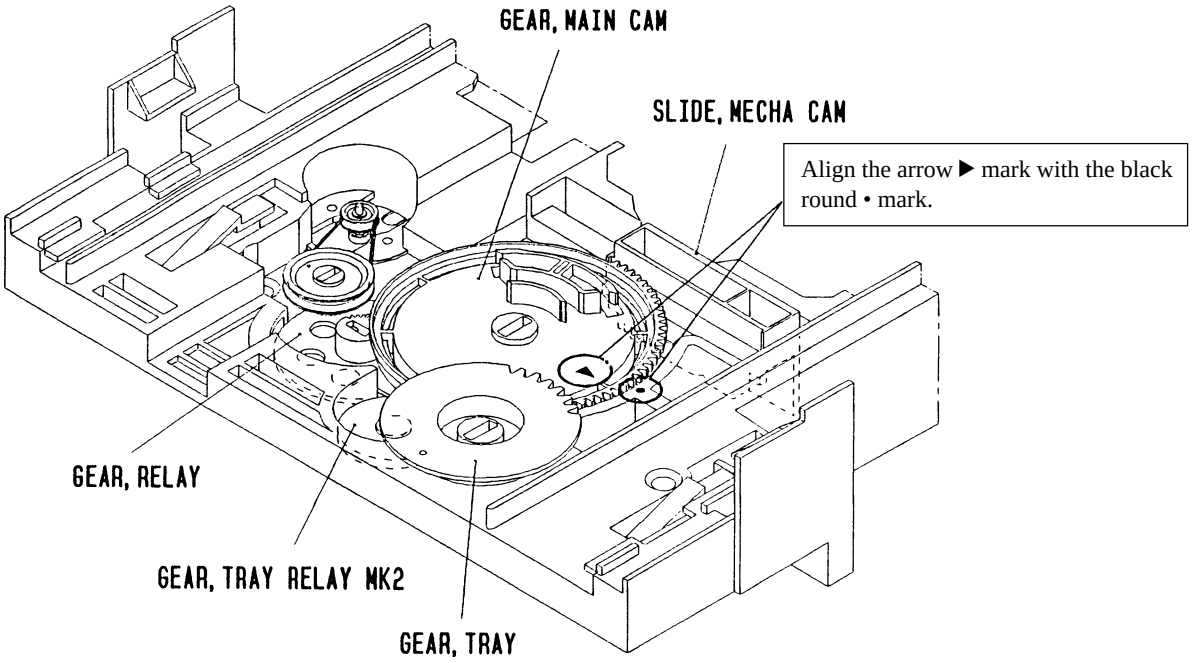
PICK-UP ASSY PWB
(5ZL-3: M8-5ZL-395-000) MODEL



How to Adjust the Rotating Phase of the Gear, Main Cam

1) Push down the hooking catch of the CHAS. MECH, and remove the TRAY.
2) Align the arrow mark of the Gear, Main Cam with the black round mark of the CHAS, MECHA as shown below.
3) Confirm that the Slide, Mech Cam is located in the right position, then insert the TRAY gently.

Caution: If the rotating phase of the Gear, Main Cam is incorrectly adjusted, the chucking operation and tray movement will have malfunction.



ELECTRICAL MAIN PARTS LIST-1/2

REF. NO	PART NO.	KANRI NO.	DESCRIPTION
IC			
	87-A21-821-030		C-IC,LC78645E<EXCEPT ZD3GNDM>
	87-A21-821-130		C-IC,LC78645NE<ZD3GNDM>
	87-A21-822-010		IC,LA6568
TRANSISTOR			
	87-026-609-080		TR,KTA1266GR
	87-026-610-080		TR,KTC3198GR
	87-A30-076-080		C-TR,2SC3052F
	87-A30-515-080		TR,2SA1979O/Y
	87-A30-075-080		C-TR,2SA1235F<ZD3GNDM>
DIODE			
	87-A40-003-080		ZENER,MTZJ4.3A<EXCEPT ZD7NFD>
	87-A40-743-080		ZENER,UZ4.3BSA<ZD7NFD>
	87-020-465-080		DIODE,1SS133 (110MA)
	87-A40-337-080		ZENER,MTZJ 6.8B<EXCEPT ZD7NFD>
	87-A40-753-080		ZENER,UZ6.8BSB<ZD7NFD>
3CD C.B			
C1	87-010-759-020		C-CAP,U 0.1-25 Z F<ZD3GNDM>
C1	87-010-759-080		C-CAP,U, 0.1-25F<EXCEPT ZD3GNDM>
C2	87-010-263-080		CAP, ELECT 100-10V
C3	87-012-349-020		C-CAP,S 1000P-50 J CH<ZD3GNDM>
C3	87-A10-915-080		C-CAP,U 1000P-25 J CH<EXCEPT ZD3GNDM>
C4	87-010-759-020		C-CAP,U 0.1-25 Z F<ZD3GNDM>
C4	87-010-759-080		C-CAP,U, 0.1-25F<EXCEPT ZD3GNDM>
C5	87-010-263-080		CAP, ELECT 100-10V
C6	87-010-405-080		CAP, ELECT 10-50V
C101	87-010-992-080		C-CAP,S 0.047-25 B<ZD3GNDM>
C101	87-A10-504-080		C-CAP,U 0.047-16 K B<EXCEPT ZD3GNDM>
C102	87-010-759-020		C-CAP,U 0.1-25 Z F<ZD3GNDM>
C102	87-010-759-080		C-CAP,U, 0.1-25F<EXCEPT ZD3GNDM>
C103	87-012-195-020		C-CAP,U 100P-50 J CH<ZD3GNDM>
C103	87-012-195-080		C-CAP,U 100P-50CH<EXCEPT ZD3GNDM>
C104	87-012-282-020		C-CAP,U 4700P-50 K B<ZD3GNDM>
C104	87-012-282-080		CAP, U 4700P-50<EXCEPT ZD3GNDM>
C105	87-010-759-020		C-CAP,U 0.1-25 Z F<ZD3GNDM>
C105	87-010-759-080		C-CAP,U, 0.1-25F<EXCEPT ZD3GNDM>
C106	87-010-263-080		CAP, ELECT 100-10V
C107	87-010-263-080		CAP, ELECT 100-10V
C108	87-010-759-020		C-CAP,U 0.1-25 Z F<ZD3GNDM>
C108	87-010-759-080		C-CAP,U, 0.1-25F<EXCEPT ZD3GNDM>
C109	87-010-263-080		CAP, ELECT 100-10V
C110	87-010-405-080		CAP, ELECT 10-50V
C111	87-010-401-080		CAP, ELECT 1-50V
C114	87-012-188-080		C-CAP,U 47P-50 CH<EXCEPT ZD3GNDM>
C114	87-012-188-020		C-CAP,U 47P-50 J CH<ZD3GNDM>
C115	87-010-759-020		C-CAP,U 0.1-25 Z F<ZD3GNDM>
C115	87-010-759-080		C-CAP,U, 0.1-25F<EXCEPT ZD3GNDM>
C116	87-010-263-080		CAP, ELECT 100-10V
C117	87-010-263-080		CAP, ELECT 100-10V
C118	87-010-759-020		C-CAP,U 0.1-25 Z F<ZD3GNDM>
C118	87-010-759-080		C-CAP,U, 0.1-25F<EXCEPT ZD3GNDM>
C121	87-010-263-080		CAP, ELECT 100-10V
C122	87-010-759-020		C-CAP,U 0.1-25 Z F<ZD3GNDM>
C122	87-010-759-080		C-CAP,U, 0.1-25F<EXCEPT ZD3GNDM>
C123	87-012-169-080		C-CAP,U 7P-50 CH<EXCEPT ZD3GNDM>
C123	87-012-169-020		C-CAP,U 7P-50 D CH<ZD3GNDM>
C124	87-012-172-020		C-CAP,U 10P-50 D CH<ZD3GNDM>
C124	87-012-172-080		CAPACITOR CHIP U 10P CH<EXCEPT ZD3GNDM>
C125	87-A11-177-080		C-CAP,S 0.15-16 K B<EXCEPT ZD3GNDM>
C125	87-016-083-020		C-CAP,S 0.15-16 RK<ZD3GNDM>
C126	87-010-263-080		CAP, ELECT 100-10V
C127	87-010-759-020		C-CAP,U 0.1-25 Z F<ZD3GNDM>
C127	87-010-759-080		C-CAP,U, 0.1-25F<EXCEPT ZD3GNDM>
C128	87-010-992-080		C-CAP,S 0.047-25 B<ZD3GNDM>
C128	87-A10-504-080		C-CAP,U 0.047-16 K B<EXCEPT ZD3GNDM>
C129	87-010-403-080		CAP, ELECT 3.3-50V
C130	87-010-759-020		C-CAP,U 0.1-25 Z F<ZD3GNDM>
C130	87-010-759-080		C-CAP,U, 0.1-25F<EXCEPT ZD3GNDM>
C131	87-010-759-020		C-CAP,U 0.1-25 Z F<ZD3GNDM>
C131	87-010-759-080		C-CAP,U, 0.1-25F<EXCEPT ZD3GNDM>
C132	87-010-263-080		CAP, ELECT 100-10V
C133	87-010-405-080		CAP, ELECT 10-50V
C134	87-010-759-020		C-CAP,U 0.1-25 Z F<ZD3GNDM>
C134	87-010-759-080		C-CAP,U, 0.1-25F<EXCEPT ZD3GNDM>
C135	87-010-260-080		CAP, ELECT 47-25V
C136	87-010-759-020		C-CAP,U 0.1-25 Z F<ZD3GNDM>
C136	87-010-759-080		C-CAP,U, 0.1-25F<EXCEPT ZD3GNDM>
C137	87-012-349-020		C-CAP,S 1000P-50 J CH<ZD3GNDM>
C137	87-A10-915-080		C-CAP,U 1000P-25 J CH<EXCEPT ZD3GNDM>
C138	87-012-349-080		C-CAP,S 1000P-50 CH
C203	87-010-112-080		CAP, ELECT 100-16V
C204	87-010-759-020		C-CAP,U 0.1-25 Z F<ZD3GNDM>
C204	87-010-759-080		C-CAP,U, 0.1-25F<EXCEPT ZD3GNDM>
C205	87-010-263-080		CAP, ELECT 100-10V
C208	87-010-759-020		C-CAP,U 0.1-25 Z F<ZD3GNDM>
C208	87-010-759-080		C-CAP,U, 0.1-25F<EXCEPT ZD3GNDM>
C212	87-010-405-080		CAP, ELECT 10-50V
C213	87-010-759-020		C-CAP,U 0.1-25 Z F<ZD3GNDM>
C213	87-010-759-080		C-CAP,U, 0.1-25F<EXCEPT ZD3GNDM>
C301	87-010-382-080		CAP, ELECT 22-25V
C302	87-010-759-020		C-CAP,U 0.1-25 Z F<ZD3GNDM>
C302	87-010-759-080		C-CAP,U, 0.1-25F<EXCEPT ZD3GNDM>
C303	87-010-260-080		CAP, ELECT 47-25V
C304	87-010-759-020		C-CAP,U 0.1-25 Z F<ZD3GNDM>
C304	87-010-759-080		C-CAP,U, 0.1-25F<EXCEPT ZD3GNDM>
C305	87-012-274-020		C-CAP,U 1000P-50 K B<ZD3GNDM>
C305	87-012-274-080		CHIP CAP,U 1000P-50B<EXCEPT ZD3GNDM>
C306	87-A11-567-080		C-CAP,S 0.01-50 K B
C401	87-012-195-020		C-CAP,U 100P-50 J CH<ZD3GNDM>
C401	87-012-195-080		C-CAP,U 100P-50CH<EXCEPT ZD3GNDM>
C402	87-012-195-020		C-CAP,U 100P-50 J CH<ZD3GNDM>
C402	87-012-195-080		C-CAP,U 100P-50CH<EXCEPT ZD3GNDM>
C403	87-012-195-020		C-CAP,U 100P-50 J CH<ZD3GNDM>
C403	87-012-195-080		C-CAP,U 100P-50CH<EXCEPT ZD3GNDM>
C404	87-012-195-020		C-CAP,U 100P-50 J CH<ZD3GNDM>
C404	87-012-195-080		C-CAP,U 100P-50CH<EXCEPT ZD3GNDM>
C405	87-012-195-020		C-CAP,U 100P-50 J CH<ZD3GNDM>
C405	87-012-195-080		C-CAP,U 100P-50CH<EXCEPT ZD3GNDM>
C601	87-010-759-020		C-CAP,U 0.1-25 Z F<ZD3GNDM>
C602	87-010-263-080		CAP, ELECT 100-10V<ZD3GNDM>
C603	87-012-180-020		C-CAP,U 22P-50 J CH<ZD3GNDM>
CN1	87-A60-429-010		CONN,16P H TOC-A
CN202	87-A60-130-010		CONN,5P V FE
CN203	87-099-199-010		CONN,6P 6216 H
CN301	87-A60-154-010		CONN,6P H FE
CN401	87-099-201-010		CONN,8P 6216 H
FB601	87-008-372-080		FILTER, EMI BL OIRNI<ZD3GNDM>
L101	87-005-469-080		COIL 4.7UH FLR50
LED601	87-A40-558-010		LED,SLZ-8128A-01-A<ZD3GNDM>
M201	87-045-305-010		MOTOR,RF-500TB DC-5V(2MA)
R104	87-012-278-080		C-CAP,U 2200P-50 B<EXCEPT ZD3GNDM>
R104	87-012-278-020		C-CAP,U 2200P-50 K B<ZD3GNDM>
R106	87-012-274-020		C-CAP,U 1000P-50 K B<ZD3GNDM>
R106	87-012-274-080		CHIP CAP,U 1000P-50B<EXCEPT ZD3GNDM>
S401	87-036-109-010		PUSH SWITCH
S402	87-036-109-010		PUSH SWITCH
X101	87-A70-318-010		VIB,XTAL 33.8688MHZ CSA-309
T-T C.B			
C401	87-A11-148-080		CAP,TC U 0.1-50 Z F
CON401	86-NFZ-675-010		CONN,5P H 6216-11H
M401	87-045-364-010		MOTOR(BCH3B14)
PS401	87-026-573-010		IC,GP1S53V<ZD7NFD>

ELECTRICAL MAIN PARTS LIST-2/2

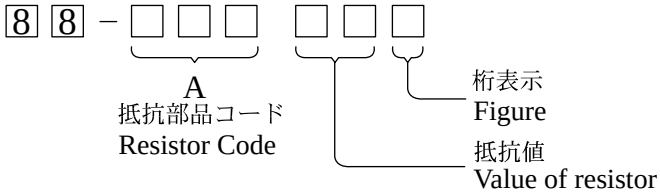
REF. NO	PART NO.	KANRI NO.	DESCRIPTION
PS401	87-A90-156-010		SNSR,SG-240<EXCEPT ZD7NFD>
DRIVE C.B(EXCEPT ZD7NFD)			
M1	87-045-363-010		MOT,MDN4RA3ETA1<EXCEPT ZD7NFD>
M2	87-045-358-010		MOT,RF-310TA 43<EXCEPT ZD7NFD>
PIN3	87-A60-086-010		CONN,6P H6216-11<EXCEPT ZD7NFD>
SW1	87-A90-042-010		SW,LEAF MSW-17310MVP0<EXCEPT ZD7NFD>

REF. NO	PART NO.	KANRI NO.	DESCRIPTION
MOTOR C.B(ZD7NFD)			
M1	87-045-356-010		MOT,RF-310TA 30<ZD7NFD>
M2	87-045-358-010		MOT,RF-310TA 43<ZD7NFD>
PIN3	87-A60-670-010		CONN,6P H 2MM JMT<ZD7NFD>
SW1	87-A90-042-010		SW,LEAF MSW-17310MVP0<ZD7NFD>

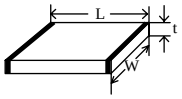
- Regarding connectors, they are not stocked as they are not the initial order items.
  The connectors are available after they are supplied from connector manufacturers upon the order is received.

○チップ抵抗部品コード／CHIP RESISTOR PART CODE

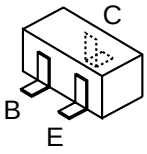
チップ抵抗部品コードの成り立ち
Chip Resistor Part Coding



チップ抵抗
Chip resistor

容量 Wattage	種類 Type	許容誤差 Tolerance	記号 Symbol	寸法／Dimensions (mm) 外形／Form	L	W	t	抵抗コード : A Resistor Code : A
1/16W	1005	± 5%	CJ		1.0	0.5	0.35	104
1/16W	1608	± 5%	CJ		1.6	0.8	0.45	108
1/10W	2125	± 5%	CJ		2	1.25	0.45	118
1/8W	3216	± 5%	CJ		3.2	1.6	0.55	128

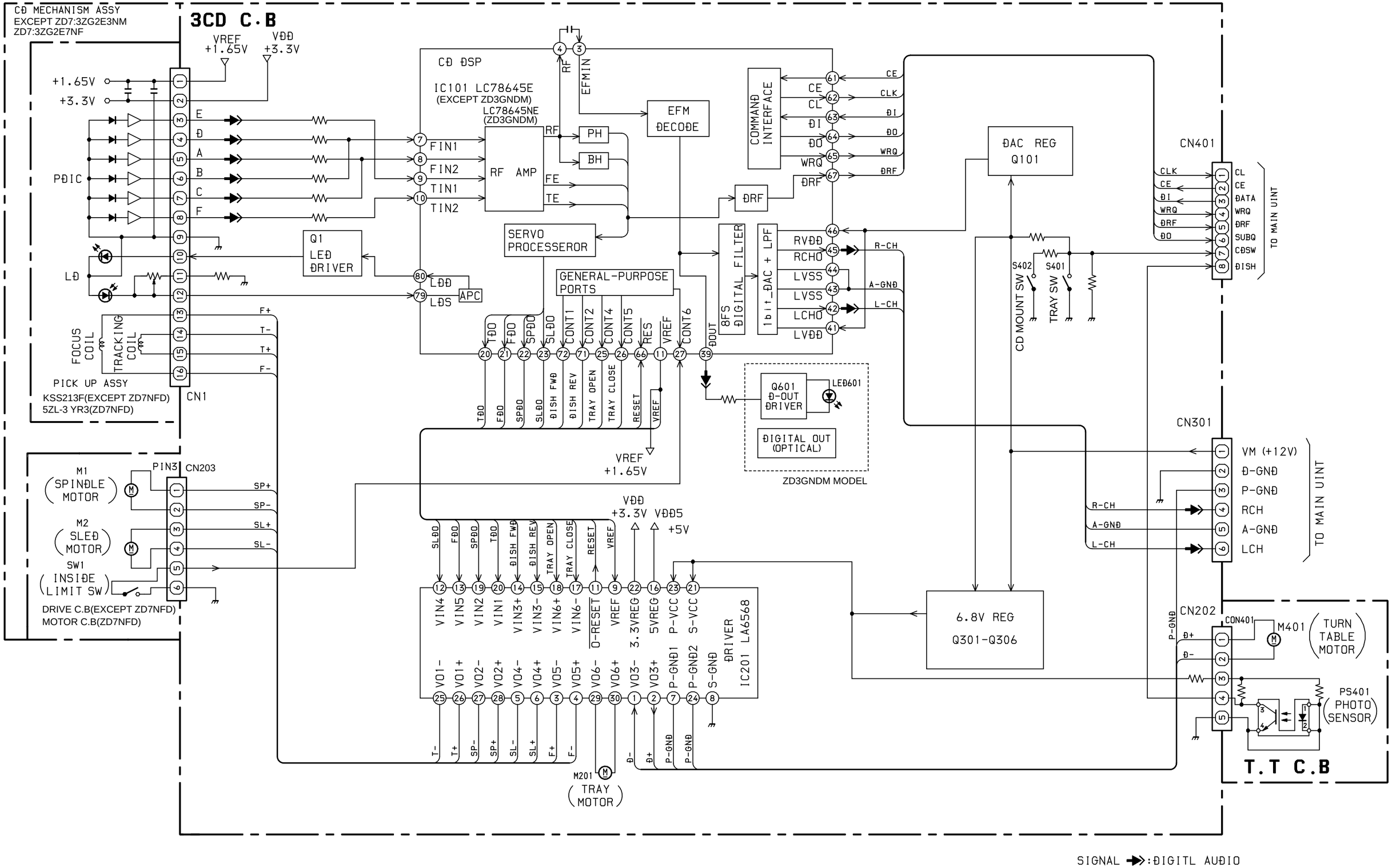
TRANSISTOR ILLUSTRATION-1/1



2SC3052
2SA1235

KTA1266
KTC3198
2SA19790

BLOCK DIAGRAM-1/1



3CĐ C.B

TO MAIN UNIT

TO MOTOR C.B
PIN3

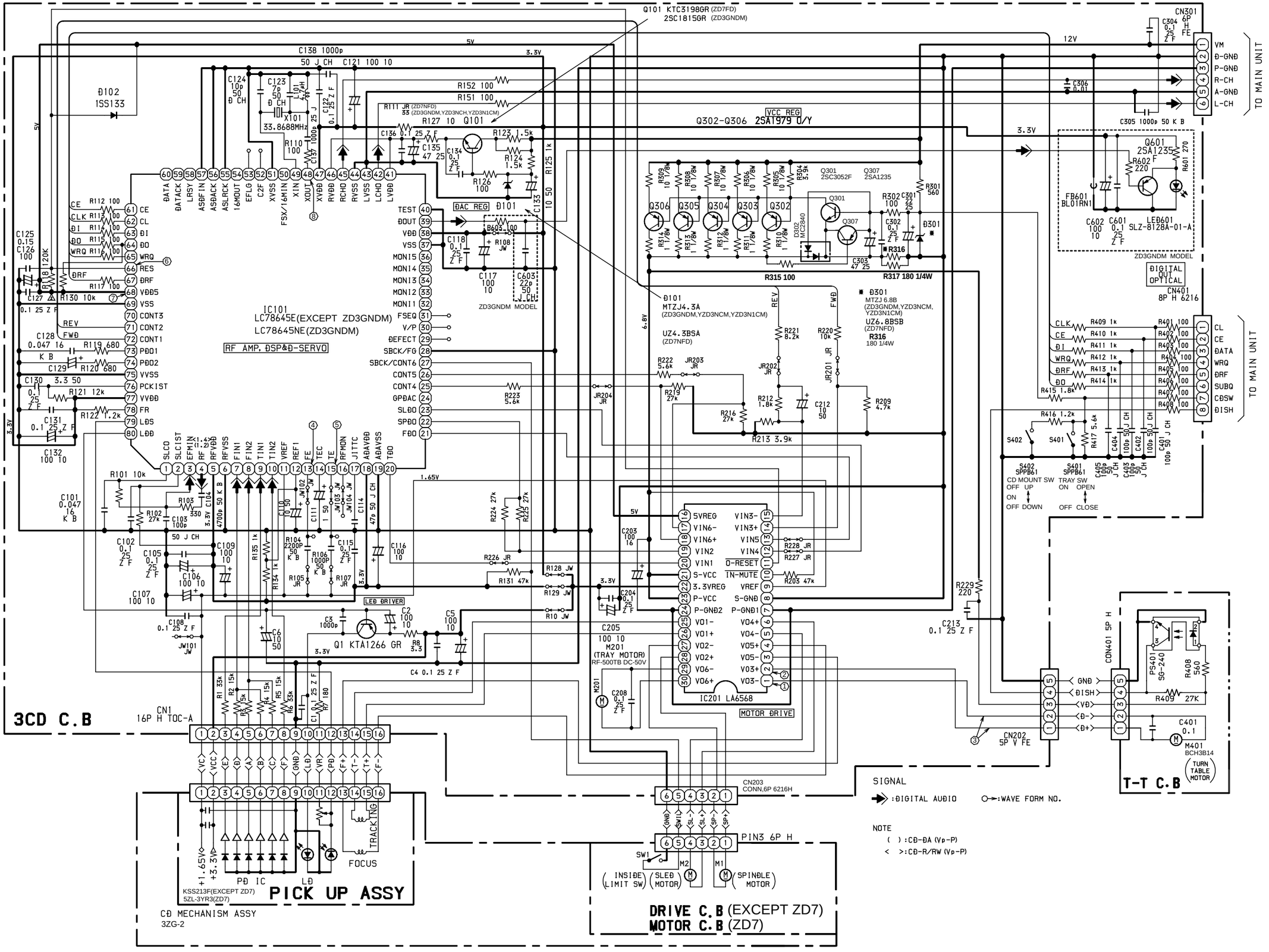
TO ĐRIVE C.B
PIN3

KSS-213F
5ZL-3
PICK UP ASSY

TO MAIN UNIT

CN401
CN203
CN001
CN301
CN202
IC101
IC201
Q1
Q302
Q303
Q304
Q305
Q306
Q307
Q301
Q501
Q601
S401
(CĐ MOUNT SW)
S402
(TRAY SW)
Đ101
Đ102
Đ301
Đ302
L101
X101
FB601
M201
(TRAY MOTOR)
ZĐ7NFĐ MODEL
ZĐ3GNĐM MODEL
ZĐ3GNĐM MODEL
Q601, LEĐ601
ĐIGI TAL OUT
(OPTICAL)
TO T-T C.B
CON401

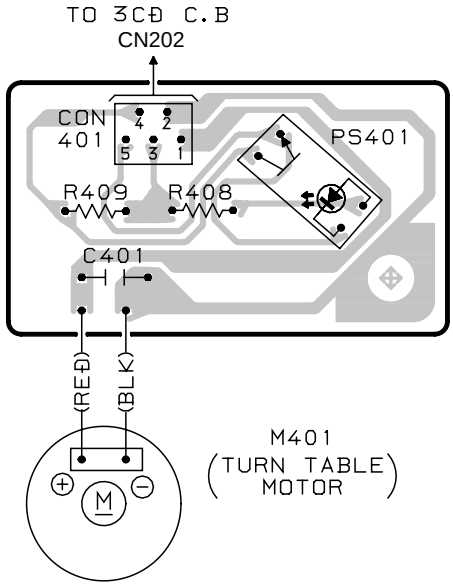
SCHEMATIC DIAGRAM-1/1



15 14 13 12 11 10 9 8 7 6 5 4 3 2 1

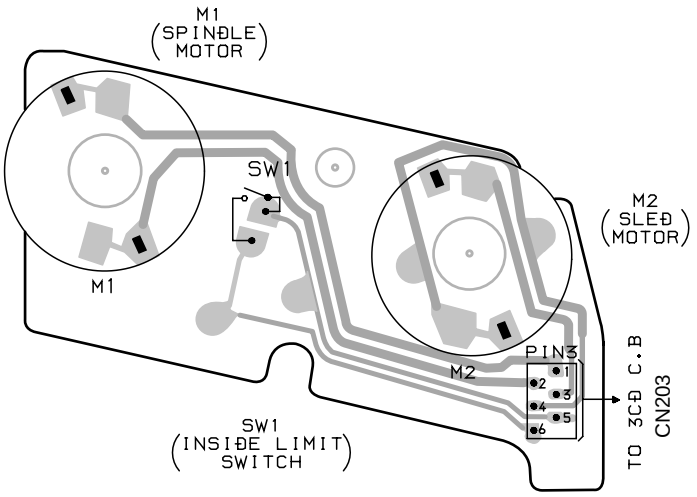
A B C D E F G H I J K L M N O P Q R S T U

T-T C.B (CONDUCTOR SIDE)



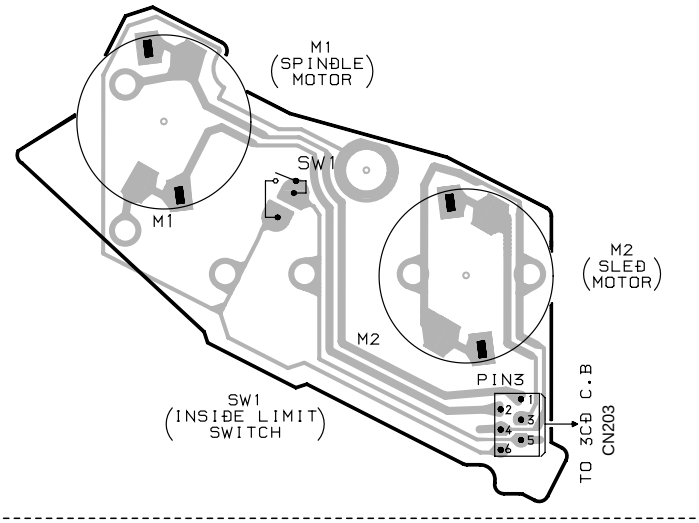
DRIVE C.B EXCEPT ZD7 MODEL

ΦRIVE C.B (CONDUCTOR SIDE)



MOTOR C.B ZD7 MODEL

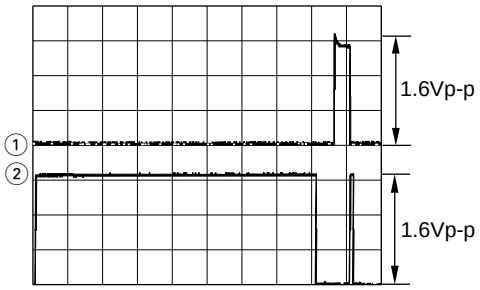
MOTOR C.B (CONDECTOR SIDE)



WAVE FORM-1/1

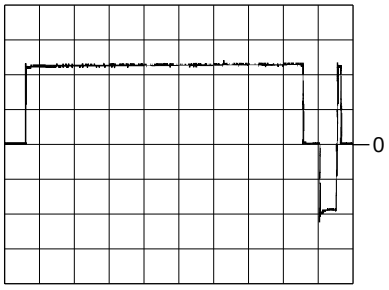
① IC201 ① (Vo3-)
② IC201 ② (Vo3+)

VOLT/DIV: 500mV
TIME/DIV: 200mS



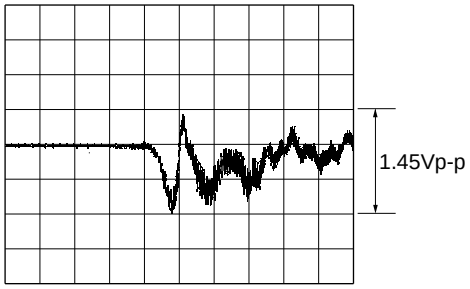
③ Between CN202 ① and ②
(② Pin: 0 Level)

VOLT/DIV: 1V
TIME/DIV: 200mS



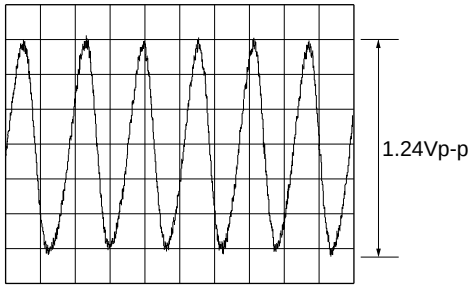
④ IC101 ⑬ (FE)

VOLT/DIV: 500mV
TIME/DIV: 5mS



⑤ IC101 ⑮ (TE)

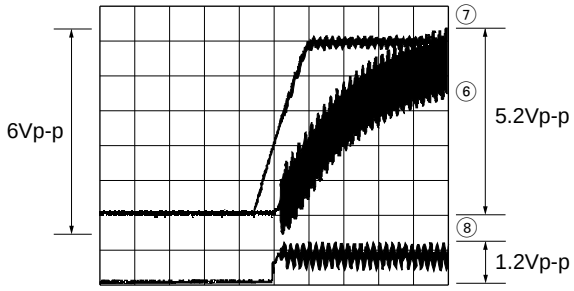
VOLT/DIV: 200mV
TIME/DIV: 200µS



⑥ IC101 ⑯ (RES)
⑦ IC101 ⑱ (VDD5)
⑧ IC101 ㊽ (XOUT)

VOLT/DIV: 1V
TIME/DIV: 10mS

(TRAY (CLOSE))

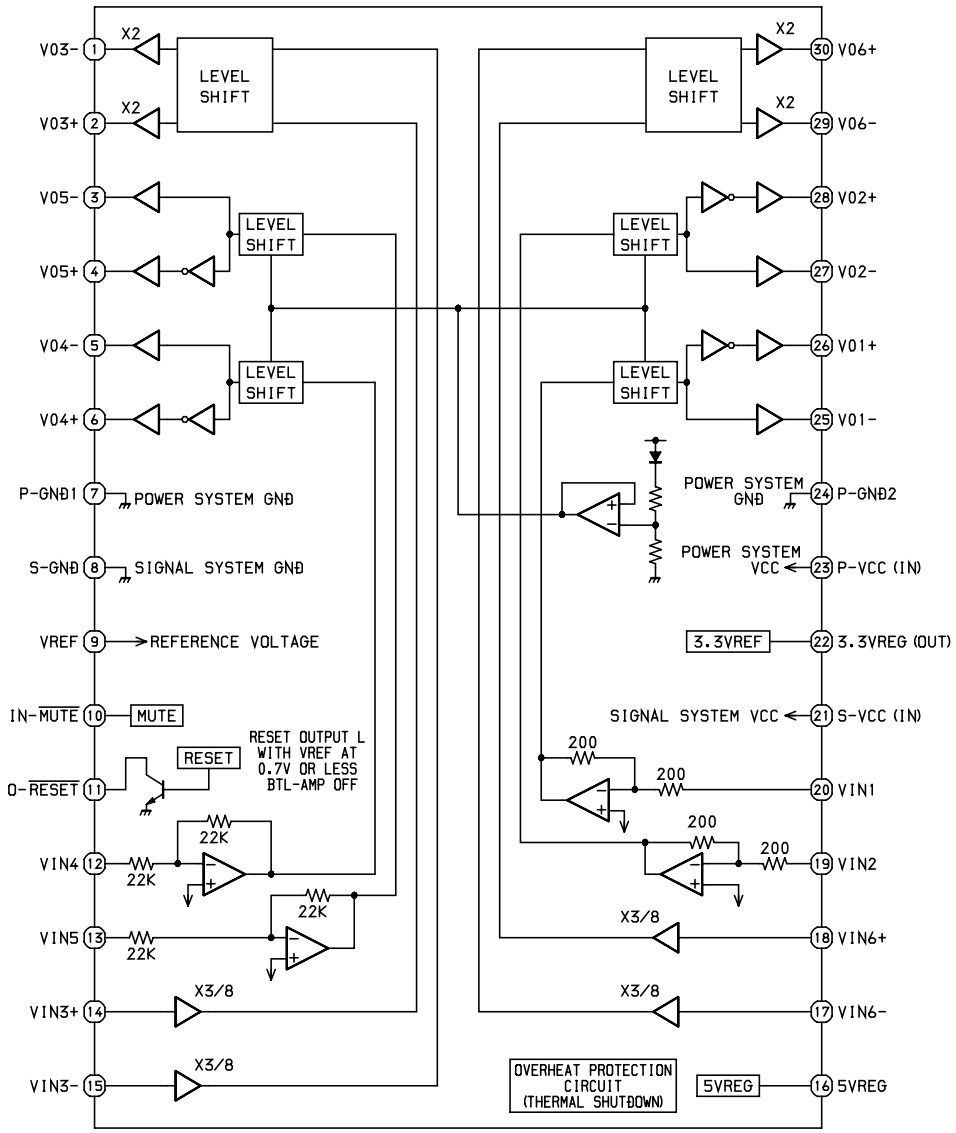


⑥ IC101 ⑯ (RES)
⑦ IC101 ⑱ (VDD5)
⑧ IC101 ㊽ (XOUT)

VOLT/DIV: 1V
TIME/DIV: 10mS

(PICK UP (UP⟷down), TRAY (OPEN))

IC BLOCK DIAGRAM-1/1
IC, LA6568



Pin No.	Pin Name	I/O	Description	
1	SLCO	O	Slice level control	Control output.
2	SLCIST	I		SLCO output current adjustment resistor connection pin.
3	EFMIN	I		RF signal input pin.
4	RF	O	RF monitor pin.	
5	RFVDD	—	RF power supply pin.	
6	RFVSS	—	RF ground pin.	
7	FIN1	I	A+C signal input pin.	
8	FIN2	I	B+D signal input pin.	
9	TIN1	I	E signal input pin.	
10	TIN2	I	F signal input pin.	
11	VREF	O	VREF voltage output pin.	
12	REFI	I	Reference voltage output setting pin.	
13	EF	O	FE signal monitor pin.	
14	TEC	O	TE signal LPF capacitor connection pin.	
15	TE	O	TE signal monitor pin.	
16	RFMON	O	RF internal signal monitor pin.	
17	JITTC	O	Jitter detection capacitor connection pin.	
18	ADAVDD	—	Servo A/D, D/A supply pin.	
19	ADAVSS	—	Servo A/D, D/A ground pin.	
20	TDO	O	Tracking control output pin. D/A output.	
21	FDO	O	Focus control output pin. D/A output.	
22	SPDO	O	Spindle control output pin. D/A output.	
23	SLDO	O	Thread control output pin. D/A output.	
24	GPDAC	O	Servo D/A general-purpose output pin. (Not connected)	
25, 26	CONT4, 5	I/O	General-purpose input/output pin 4, 5.	
27	SBCK/CONT6	I/O	General-purpose input/output pin 6, or subcode read clock input pin.	
28	SBCK/FG	I	Subcode read clock input pin/FG signal input pin/external emphasis setting pin. Set to command -pin function.	
29	DEFECT	O	Defect pin.	
30	V/P	O	Rouge servo/phase control automatic switching monitor output pin. “H” for rough servo and “L” for phase servo.	
31	FSEQ	O	Synchronization signal detection output pin. Outputs a high level when the synchronization signal detected from the EFM signal and the internally generated synchronization signal agree.	
32, 36	MONI1, 5	O	Internal signal monitor pin 1, 5. (Not connected)	
37	VSS	—	Digital ground pin.	
38	VDD	—	Digital power supply pin.	
39	DOUT	O	Digital OUT output pin.	
40	TEST	I	Test input pin.	
41	LVDD	—	L channel D/A converter	Lchannel power supply pin.
42	LCHO	O		L channel output pin.

Pin No.	Pin Name	I/O	Description	
43	LVSS	—	L channel D/A converter	L channel ground pin.
44	RVSS	—	R channel D/A converter	R channel ground pin.
45	RCHO	O		R channel output pin.
46	RVDD	—		R channel power supply pin.
47	XVDD	—	Crystal oscillator	Crystal oscillator power supply pin.
48	XOUT	O		Connection for a 33.8688MHz crystal oscillator pin.
49	XIN	I		
50	FSX/16MIN	I/O	7.35kHz synchronization signal output pin. DF, DAC external clock input pin. (Not connected)	
51	XVSS	—	Crystal oscillator	Crystal oscillator ground pin.
				Must be connected to 0V.
52	C2F	O	C2 flag output pin.	
53	EFLG	O	C1, C2 error correction monitor pin.	
54	16MOUT	O	16.9344MHz output pin. (Not connected)	
55	ASLRCK	I	Antishock mode	L/R clock input pin.
56	ASDACK	I		Bit clock input pin.
57	ASDFIN	I		L/R channel data input pin.
58	LRSY	O	Digital data output	L/R clock output pin. (Not connected)
59	DATACK	O		Bit clock output pin. (Not connected)
60	DATA	O		L/R channel data output pin. (Not connected)
61	CE	I	Microprocessor interface	Chip enable signal input pin.
62	CL	I		Data transfer clock input pin.
63	DI	I		Data input pin.
64	DO	O		Data output pin. (Nch open drain output)
65	WRQ	O		Interruption signal output pin.
66	RES	I	Reset input pin. This pin must be set low briefly after power is first applied.	
67	DRF	O	Focus ON detect pin.	
68	VDD5	—	Microprocessor interface power supply pin.	
69	VSS	—	Digital ground pin.	
70	CONT3	I/O	General-purpose output pin 3. (Not connected)	
71, 72	CONT2, 1	I/O	General-purpose output pin 2, 1.	
73, 74	PD01, 2	O	PLL	Phase comparison output pin 1, 2 to control built-in VCO.
75	VVSS	—		Built -in VCO GND pin.
76	PCKIST	I		Resistor connection pin to set current for PD01 and 02 outputs.
77	VVDD	—		Built-in VCO power supply pin.
78	FR	I		Resistor connection pin to set the frequency range of built-in VCO.
79	LDS	I	Laser power detection signal input pin.	
80	LDD	O	Laser power control signal output pin.	

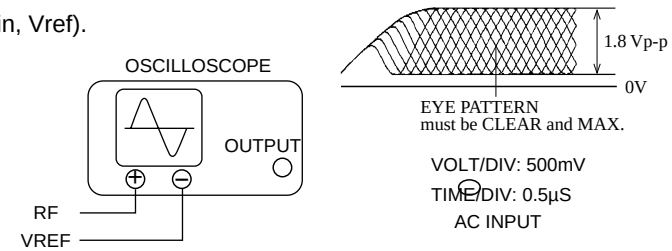
ELECTRICAL MESUREMENT

- Perform the adjustments after the machine enters the test mode.
- Place the CD mechanism horizontally level.
- Equipment and tools required

Measuring equipment: Oscilloscope (Use the probe of 10:1)
Digital Multimeter (Use it in the DC Volt range.)
Jitter meter (Kikusui 6235 or equivalent)
Test disc: TCD-782
ATD-001

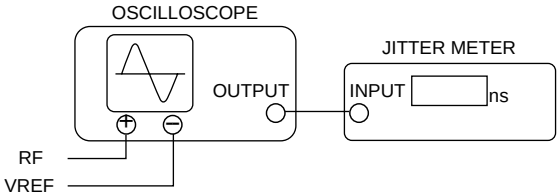
1. RF Waveform Check

1) Connect an oscilloscope to test point (IC101 4pin, RF), (IC101 11pin, Vref).
2) Play back the 2nd track of the TCD-782.
3) Check to see that the RF waveform has the maximum amplitude and the center of the wedge waveform has the clear blank.



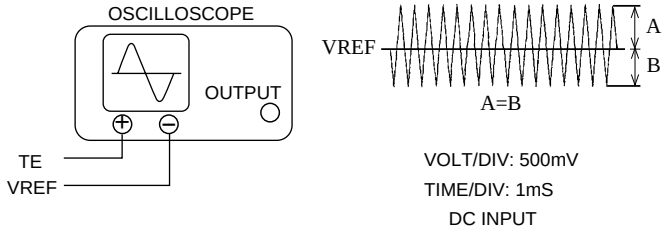
2. Jitter Check

1) While an oscilloscope is kept connected in the same test point as in the 2. RF Waveform Check, connect the output terminal of an oscilloscope to the input terminal of a jitter meter.
2) Set the VOLT range selector of an oscilloscope to 500 mV range or lower.
3) Play back the 2nd track of the TCD-782.
4) Check to see that a jitter meter indicates 40.0 ns or less.



3. Tracking Balance Check

1) Connect an oscilloscope to test point (TE), (VREF).
2) Play back the 2nd track of the TCD-782 and press the PAUSE button.
3) Check to see that the traverse waveform on an oscilloscope is vertically symmetrical.



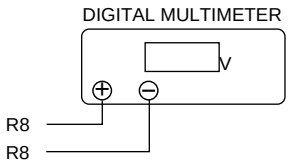
45. Play-ability Check

1) Play back the 4th, 9th and 13th track of ATD-001. Check to see that noise does not occur and sound skipping does not occur.

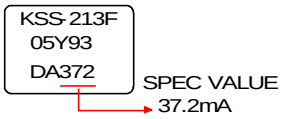
6. Laser Current Check

*Do not perform this measurement unless the laser is suspected to be defective.

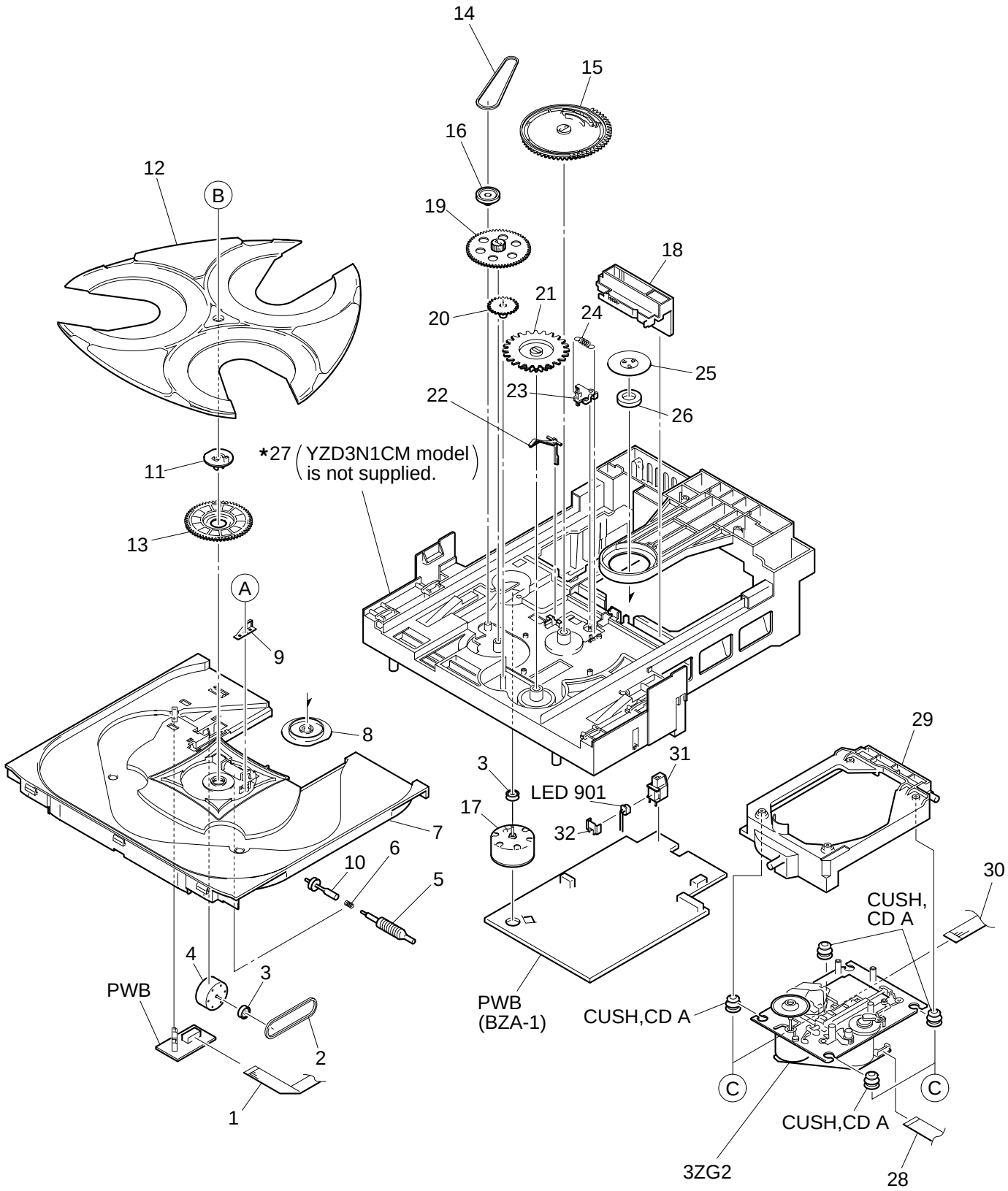
1) Connect a Digital Multimeter across the resistor R8 (3.3 ohms).
2) Play back the TCD-782 and check the DC voltage value on a Digital Multimeter.
3) Calculate the laser current (Iop) by dividing the DC voltage across R8 by the resistor value.
   Laser current (Iop) = DC voltage across R8 divided by the resistor value (3.3 ohms).
   5ZL-3 R3 : Check to see that the laser current (Iop) is 80 mA or less.
   KSS-213F : Check to see that the laser current (Iop) is SPEC VALUE +15%.
   (Refer to the EXAMPLE)



EXAMPLE



MECHANICAL EXPLODED VIEW-1/1



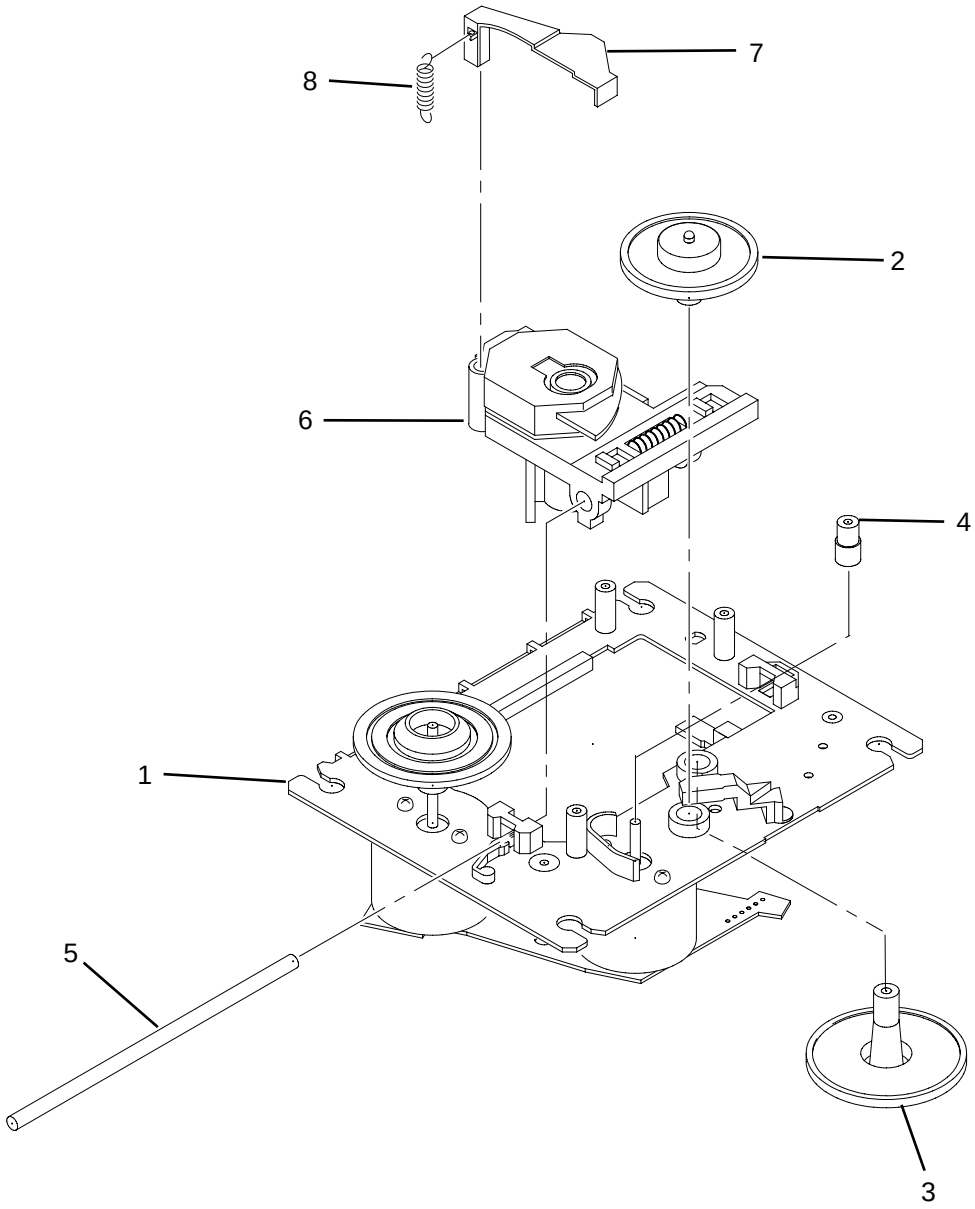
MECHANICAL PARTS LIST-1/1

REF. NO	PART NO.	KANRI NO.	DESCRIPTION
1	84-ZG1-672-010		F-CABLE,5P 1.25 210MM WHITE N
2	84-ZG1-225-010		BELT,SQ1.0-63.3
3	84-ZG1-267-010		PULLEY,LOAD MO 8
4	87-045-364-010		MOTOR(BCH3B14)
5	84-ZG1-238-010		GEAR,WORM N
6	84-ZG1-248-010		SPR-C,WORM
7	8B-ZG9-001-010		TRAY,GRA<ZD3GNDM>
7	8A-ZG1-001-010		TRAY,NO3 BLU<EXCEPT ZD3GNDM>
8	84-ZG1-291-110		HLDR,MAGNET 4 NAT<EXCEPT YZD3N1CM>
8	84-ZG1-283-110		HLDR,MAGNET V 4<YZD3N1CM>
9	84-ZG1-259-010		SPR-P,WORM
10	84-ZG1-239-210		PULLY,WORM N
11	84-ZG1-224-010		LEVER,TT<YZD3N1CM>
11	84-ZG1-288-010		LEVER,TT NAT<EXCEPT YZD3N1CM>
12	8B-ZG5-001-010		TURN TABLE,GRA<ZD3GNDM>
12	8A-ZG1-002-110		TURN TABLE,NO1 BLU<EXCEPT ZD3GNDM>
13	84-ZG1-221-010		GEAR,MAIN TT<ZD7NFD>
13	84-ZG1-269-010		GEAR,MAIN TT 4<EXCEPT ZD7NFD>
14	84-ZG1-209-010		BELT,SQ1.8-117.7
15	84-ZG1-203-410		GEAR,MAIN CAM<EXCEPT YZD3N1CM>
15	8A-ZG1-218-010		GEAR,MAIN CAM BLU 4<YZD3N1CM>
16	84-ZG1-207-010		PULLEY,RELAY
17	87-045-305-010		MOTOR, RF-500TB DC-5V (2MA)
18	84-ZG1-216-310		SLIDE,MECHA CAM YEL<YZD3N1CM>
18	84-ZG1-204-310		SLIDER,MECHA CAM<EXCEPT YZD3N1CM>
19	84-ZG1-274-010		GEAR,RELAY 8
20	81-ZG1-291-110		GEAR,TRAY RELAY NO3
21	84-ZG1-205-210		GEAR,TRAY (*)
22	83-ZG3-213-010		LVR,SW
23	84-ZG1-208-210		LEVER,CAM<ZD7NFD>
23	84-ZG1-266-010		LEVER,CAN 8<EXCEPT ZD7NFD>
24	84-ZG1-211-010		SPR-E CAM S
25	84-ZG1-285-010		PLATE,MAGNET BLK<YZD3N1CM>
25	81-ZG1-255-110		PLATE,MAGNET MK2<EXCEPT YZD3N1CM>
26	83-ZG3-604-010		RING,MAG 2
*27	84-ZG1-286-010		CHAS,MECHA NAT<EXCEPT YZD3N1CM>
28	84-ZG1-630-010		CABLE FFC 6P-1.25
29	84-ZG1-287-010		HLDR,MECHA NAT<EXCEPT YZD3N1CM>
29	84-ZG1-212-210		HLDR,MECHA NO2<YZD3N1CM>
30	85-NFT-611-110		FF-CABLE 16P-1.0
31	84-ZG1-244-310		CABI,OPTICAL<ZD3GNDM>
32	84-ZG1-261-010		LID,OPTICAL<ZD3GNDM>
A	87-067-981-010		BVT2+3-6 BLK
B	87-B10-331-010		VF+3-6 BLK
C	81-ZG1-271-010		S-SCREW MECH REAR

COLOR NAME TABLE

Basic color symbol	Color	Basic color symbol	Color	Basic color symbol	Color
B	Black	C	Cream	D	Orange
G	Green	H	Gray	L	Blue
LT	Transparent Blue	N	Gold	P	Pink
R	Red	S	Silver	ST	Titan Silver
T	Brown	V	Violet	W	White
WT	Transparent White	Y	Yellow	YT	Transparent Yellow
LM	Metallic Blue	LL	Light Blue	GT	Transparent Green
LD	Dark Blue	DT	Transparent Orange	GM	Metallic Green
YM	Metallic Yellow	DM	Metallic Orange	PT	Transparent Pink
LA	Aqua Blue	GL	Light Green		

MECHANISM EXPLODED VIEW 1/2 (3ZG-2)



CD MECHANISM PARTS LIST-1/2 (3ZG-2)

REF. NO	PART NO.	KANRI NO.	DESCRIPTION
1	83-ZG2-262-010		CHAS ASSY,E3
2	83-ZG2-235-010	0E	GEAR,A3
3	83-ZG2-205-210	0E	GEAR,B
4	83-ZG2-236-010	0E	GEAR,MOTOR 3
5	83-ZG2-253-110	0E	SHAFT,SLIDE 5
6	M8-5ZL-395-000	2Y	5ZL-3 YR3<E7NF >
6	87-A90-836-010	2Y	PICKUP,KSS-213F<E3NM >
7	83-ZG2-245-510	1A	LEVER,SHUTTER(*)<E3NM >
8	83-ZG2-250-210	0E	SPR-E,SHT 2<E3NM >

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